Paint Production Men Confer—page 45

Oil, Paint and Drug Reporter

Founded 1871 by William O. Allison *Member Audit Bureau of Circulations*

THE CHEMICAL MARKET AUTHORITY SINCE 1871

Volume 140
Number 18

Published by
Schnell Publishing Company, Inc.

November 3, 1941

SHARPLES TRADE MARK CHEMICALS

MONOETHYLAMINE
DIETHYLAMINE
TRIETHYLAMINE

SHARPLES CHEMICALS INC.
PHILADELPHIA CHICAGO NEW YORK

Established 1880

WM. S. GRAY & CO.
342 MADISON AVENUE
NEW YORK CITY

Cable Address: Graylime
Phone: MUrray Hill 2-3101

ROSIN
TURPENTINE
Chemicals Solvents

Baker's

Baker's
TIN CRYSTALS
(Stannous Chloride)
Large crystals assure less oxidation

J. T. BAKER CHEMICAL CO.
Phillipsburg, New Jersey
NEW YORK PHILADELPHIA CHICAGO

HIGH-PRESSURE CHEMICALS SYNTHETIC

A SYMBOL OF PROGRESS IN THE DEVELOPMENT OF HIGH-PRESSURE SYNTHETIC CHEMICALS

DU PONT

E. I. DU PONT DE NEMOURS & CO. (INC.)
Ammonia Department . . . Wilmington, Del.

LITHARGE

PRIOR CHEMICAL CORPORATION • NEW YORK
420 LEXINGTON AVENUE
Chicago Office: 230 N. Michigan Ave.

Sole Selling Agents for
Fort Washington Chemical Company
Fort Washington, Pa.

20 MULE TEAM

Guaranteed 99½% to 100% Pure

BORAX
BORIC ACID
Refined and U. S. P.
• Crystal • Granulated • Powdered • Impalpable •
• Calcined • Anhydrous •
Borax Glass Manganese Borate Ammonium Borate
Samples on request

PACIFIC COAST BORAX COMPANY
Dept. Q
51 Madison Avenue, New York
CHICAGO ILLINOIS

RECEIVED NOV 3 1941 LIBRARY THE CHEMISTS' CLUB

So, make sure . . .

Your Vitamin B Complex Product Contains ALL the Factors

Yeast contains the entire natural Vitamin B Complex. All of the factors . . . known and unknown . . . are found in the following Yeast Products:

1. **FLEISCHMANN'S HIGH B YEASTS** (Types 200-B, 90-B and 50-B)
2. **FLEISCHMANN'S BEE-FLEX TYPE 321** (150 International Units B1 and 500 micrograms riboflavin per gram)

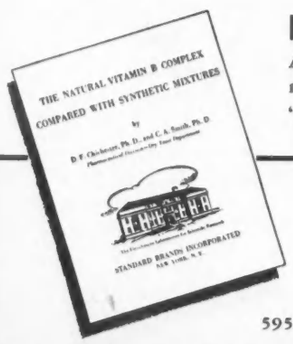
Inquiries are invited concerning these products for food and pharmaceutical uses.

The entire

NATURAL B COMPLEX

contains:

KNOWN AND PRODUCED CHEMICALLY	Vitamin B_1 (Thiamin)
	Vitamin B_2 or G (Riboflavin)
	Nicotinic Acid
	Vitamin B_6 (Pyridoxine)
	Pantothenic Acid
SOME OF THE MANY OTHERS KNOWN OR POSTULATED	Biotin (H)
	Anti-gray hair factor
	P-Aminobenzoic acid
	Vitamin L_2
	Inositol
	Choline
	plus the unknowns



FREE *BOOKLET ON THE B COMPLEX*

An enlightening summary of findings relative to the entire natural B COMPLEX in comparison with the known "synthetic" factors may be had upon request.

STANDARD BRANDS INCORPORATED

Pharmaceutical Division • Special Products Department

595 MADISON AVENUE NEW YORK, NEW YORK

Oil, Paint and Drug Reporter

Founded 1871 by William O. Allison
Member Audit Bureau of Circulation

Published by
Schnell Publishing Company, Inc.

Volume 140 | November 3, 1941 | Number 18

Glycerin Prices Ceiled by OPA

OPD Washington Bureau
October 28, 1941

Maximum prices of 11½ cents per pound for crude glycerin (80 percent glycerol) and 18 cents per pound for the refined type were ordered today by Price Administrator Leon Henderson. Mr. Henderson issued price schedule No. 38, bringing glycerin under ceiling prices sharply below current levels as quoted by refiners for fourth quarter delivery of 18 cents per pound for crude and 21½ cents for refined. The new price schedule becomes effective November 10. Announcing the new ceiling, Mr. Henderson said:—

From 1938 until the beginning of this year crude glycerin prices remained approximately unchanged at 7¾ cents a pound. Soon thereafter the price jumped to 9 cents a pound, and before the Summer was over had risen another 4 cents. This new price, which was not reasonable in itself, was raised by another 5 cents a pound to 18 cents on September 15.

Thus, we have one of industry's basic chemicals, which enjoyed almost complete price stability for three years, rising by nearly 150 percent in about nine months. As to refined glycerin, prices which ranged from 12½ to 14½ cents over a 28-month period to last April, have since soared to 21½ cents a pound and are threatening to go even higher.

Production of glycerin for the current year is estimated at around 200,000,000 pounds. About 50 percent of this will be used in the production of dynamite and other explosives, synthetic resins, transparent cellulose wrapping material and in processing tobacco. Many additional millions of pounds will be used in the manufacture of drugs, cosmetics and printers' inks. The textile, chemical and paper industries will use about 5,000,000

—Continued on page 68

Glycerin Ceiling Brings Small Soaper Rebellion

Rebellion of small soapers against prices named as a ceiling by the Office of Price Administration last week was prompt and intense. No sooner was the decision of OPA taken than meetings of small producers of crude glycerin formed in New York City and protest plans were laid.

Some ten companies, located in and out the city, were represented and the consensus was that no small soaper could recover crude glycerin and sell it at ceiling prices except by taking an actual money loss, according to the Manhattan Soap Company.

The fact that production costs of the small company run higher than those of the large soap manufacturers, especially soap makers who also refine glycerin, was stressed as a reason for seeking relief from the OPA ceiling.

Plans reported last Friday called for a committee to go to Washington to lay a formal protest before OPA. The meeting with OPA was reported scheduled for November 3.

Failing to get relief from what the protestants call an "impossible situation," the small soapers in meeting assembled declared "they would curtail recovery to the limit and turn the glycerin they were forced to produce into the sewers."

DCAT Annual Meeting November 18

The Drug Chemical and Allied Trades Section of the New York Board of Trades will hold its fifty-first annual meeting in the Drug and Chemical Club, this city, November 18. Dinner will be served in the club at 6:30 p.m.

Zinc Pool Quotas For November Set

OPD Washington Bureau
October 29, 1941

November zinc pool requirements were announced today by the Priorities Division. Producers of metallic zinc are directed to set aside an amount equal to 31 percent of their August, 1941, production. Zinc oxide pool requirements call for an amount equal to 10 percent of the August, 1941, production. No zinc dust need be set aside in November.

W. R. Boyd Named A.P.I President

The executive committee of the American Petroleum Institute last week elected W. R. Boyd jr. president, to serve out the unexpired term of the late Axtell J. Byles. Mr. Boyd had been executive vice-president. He will serve as president at least until

W. R. Boyd, Jr.

the election to be held in connection with the twenty-second annual meeting of the institute in San Francisco from November 3 to 7.

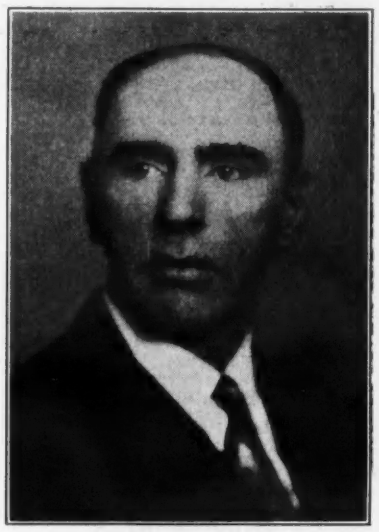
Agricultural Chemists Amend Fertilizer Materials Definitions

OPD Washington Bureau, October 30, 1941

The Association of Official Agricultural Chemists completed its fifty-seventh annual meeting yesterday after adopting minor amendments to its definitions of terms and interpretations of fertilizers and electing a new set of officials. The association also amended its constitution to set the date of effectiveness of methods or changes in methods of determining definitions of agricultural chemicals so that these methods will become effective in the future thirty days after publication of the record of the action in the official Journal of the Association.

Officers for the coming year were elected as follows:—President, J. W. Sale, U. S. Food and Drug Administration, vice-president; G. C. Frary, Vermillion, S. D.; and secretary-treasurer (re-elected), W. W. Skinner, Bureau of Agricultural Chemistry and Engineering. The new executive committee is as follows:—J. O. Clarke, Chicago, Ill.; G. H. Marsh, Montgomery, Ala.; L. B. Broughton, University of Maryland; and W. H. Ross, Bureau of Plant Industry.

At the outset of the meeting the association defined nitrate of soda and potash as a commercial product con-



J. W. Sale

taining nitrates of sodium and potassium which contain not less than 14 percent of nitrogen (N) and 14 percent of potash (K_2O).

The committee report also contained a provision "guaranteeing in term of elements" the following:—

All fertilizer components with the exceptions of potash (K_2O) and phosphoric acid (P_2O_5) if guaranteed shall be stated in terms of the elements.

In a tentative first reading, the association stated that magnesium oxide is a commercial product containing not less than 92 percent of the oxide of magnesium.

—Continued on pag 77

Chemical Imports Drop 9 Percent

OPD Washington Bureau
October 28, 1941

Imports of chemicals and allied products into the United States declined 9 percent to $92,900,000 during the first eight months of 1941, from $101,900,000 during the first eight months of 1940, according to the Department of Commerce. Many of the basic chemical materials indigenous to foreign countries which United States manufacturers have imported annually to a large extent were imported in the first eight months of 1941 in increased amounts than in the corresponding period of 1940. Imports of chemicals and allied products into the United States by major groups were:—

Group or item.	January-August 1940.	January-August 1941.
Gums and resins	$11,443,300	$14,599,100
Lac, crude, seed	1,336,600	2,022,600
Shellac, unbleached	2,726,800	3,479,300
Crude drugs, etc	9,070,900	8,349,100
Cinchona bark	565,700	1,805,000
Pyrethrum flowers	1,872,400	910,500
Tung oil	18,659,300	5,117,500
Carnauba wax	5,592,300	9,138,200
Coaltar products	6,967,000	5,895,200
Medicinal preparations	3,278,700	6,163,200
Industrial chemicals	9,254,100	9,997,200
Paints and pigments	780,500	507,300
Fertilizers and materials	22,136,300	14,276,700
Calcium cyanamide	1,940,400	2,213,000
Sodium nitrate	10,053,700	6,597,100
Soaps and toilet preparations	1,636,900	1,502,000

Tanners Council Discusses Supplies, Production, Prices

Supplies, priorities, production and price ceilings were discussed at the twenty-fifth annual meeting of the Tanners Council of America, held in the Stevens hotel, Chicago, October 22-24. Officers elected were:—

Chairman of the board (re-elected), Harold Connett; vice-chairman (re-elected), Everett Pervere; treasurer, E. Carle Shotwell, of the Helburn Thompson Company, Boston, Mass.; executive vice-president (re-elected), Merrill A. Watson, and secretary (re-elected), J. Louis Nelson.

Dr. Fred O'Flaherty, director of the department of applied science in tanning research of the University of Cincinnati, in an address on "A Consideration of the Supply of Materials Used in Leather Manufacture" and the possible substitutes for non-available materials, said:—

The main concern to date in beam house materials has been unhairing agents and acids. The general use of sodium sulphide in the industry has made this an item in great demand; it is further complicated by the government purchase of sodium sulphide for some export purpose. Fortunately we have had several new developments in this field during the past several years. I refer to the amines, sodium sulphhydrate, calcium sulphhydrate, as well as some trade named products. Then, too, recently a firm has been developing some of the arsenic sulphides, and cyanides have had an experimental trial. With all these different unhairing accelerators, there should be no permanent shortage. Then, too, unhairing can be accomplished by lime liquors only if necessary.

The acids used in the beam house as well as throughout the tannery are often temporarily not available, but the latitude of substitution here is so wide that to date no serious difficulty has arisen.

The use of disinfectants in the beam house has been upset, as so many of the commonly used materials are short. This shortage is not too acute and by looking about some substitute can usually be

—Continued on page 35

OPA-Fertilizer Industry Parley Defense Problems

OPD Washington Bureau
October 27, 1941

Problems of the fertilizer industry in relation to national defense were discussed last week at a meeting of about forty members of the trade and twenty government officials, headed by Leon Henderson, Administrator, Office of Price Administration. Following the meeting it was indicated that an industry advisory committee would be appointed by the government to handle these problems.

It was brought out at the conference that the nitrogen situation is not a problem of total supply but rather one of form and transportation. There are adequate supplies of phosphate rock to produce more than twice the fertilizer requirements for normal superphosphate, it was disclosed, and although demand for sulphuric acid has increased there is sufficient supply at present to acidulate the rock. Transportation also was the problem in potash, it was stated, as present production is about 50,000 tons over the amount used last year.

OPD Price Index

The OIL, PAINT AND DRUG REPORTER'S relative record of prices for chemicals, oils, and drugs is currently as follows:—

Oct. 31, 1941	Oct. 24, 1941	Nov. 1, 1940
134.2	**133.4**	**103.1**

Dyestuffs, textile and leather chemicals, botanical drugs, spices, and gums, essential oils and aromatic chemicals were higher than a week ago. Oils, fats and waxes and fertilizer materials were lower. All other groups were unchanged.

The base of the OPD Price Index is the average of prices in 1926 and 1936, those years representing extremes of price undulations in the interwar period.

Closing Markets

Spruce Extract Price Up

Effective November 1, price for powdered super spruce extract in car lots, bags, was advanced ½c. to the basis of 4½c. per pound. No change occurred in the prices for the regular spruce extract or tankcar price for the super grade.

Peanut Oil Higher

Sales of crude peanut oil were reported on Friday at 12¼c. per pound, Southeast, showing an advance. Offerings were reported scarce at the rise.

Defense Materials Price-Index Trend

Markets for strategic materials were quiet during the week ended October 25, and the Bureau of Labor Statistics' index of prices for these materials remained unchanged at last week's level, 143.0 percent of the August, 1939, average.

Index numbers of market prices of strategic and critical materials are:—

(August 1939 = 100)

1941	Strategic	Critical
October 18	143.0	116.6
October 25	143.0	116.8

Bids Wanted

Acetone: — 4,500 gallons; Commanding Officer, Picatinny Arsenal, N. J.; procurement 885, opening November 13.

Alcohol, Ethyl:—3,000 wine gallons; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9233, opening November 13.

Aluminum Paste:—7,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9230, opening November 13.

Beeswax, Yellow:—5,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9228, opening November 13.

Calcium Chloride:—120,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9241, opening November 7.

Caustic Soda:—90,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9239, opening November 13.

Cresol Solution:—5,000 gallons; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9232, opening November 13.

Deodorant:—1,000 pounds; Commanding Officer, Picatinny Arsenal, N. J.; procurement 788, opening October 29.

Drugs:—371,800 tubes; Navy Purchasing Office, Federal Office Building, 90 Church street, New York, N. Y.; schedule 1755, opening November 4.

Glycerin:—2,200 gallons; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9237, opening November 13.

Linseed Oil:—54,300 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9226, opening November 13.

Metal Polish:—150,000 pints; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9235, opening November 13.

Mercury:—1,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9238, opening November 13.

Soda Ash:—1,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9236, opening November 13.

Rust-Preventive Compound: — 3,050 gallons; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9229, opening November 13.

Saltwater Soap:—700,000 pounds; Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9234, opening November 13.

Sodium Stannate:—500 pounds; Commanding Officer, Picatinny Arsenal, N. J., procurement 831, opening November 7.

Soda Phosphate:—200,000 pounds, Bureau of Supplies & Accounts, Navy Department, Washington; schedule 9227, opening November 13.

Zinc Dust: — 300,000 pounds; Chemical Warfare Service, Edgewood Arsenal, Md.; invitation 30, opening November 7.

Contents of This Issue

News and Statistics

American Borax Acquires 260-Acre Boron Deposits 67
Ammonia Carbonate and Bicarbonate Prices Extended..... 34
American Can Revamps Sales Administration 39
American Zinc, Lead Buys Process for Amer. Cyanamid..... 62
Agricultural Chemists Amend Definitions of Fertilizer Materials.... 3

Baytown Toluol Plant Production Started 39
Boyd Named A.P.I. President..... 3

Chemical Imports Drop 9 Percent.. 3
Chemical Salesmen to Hold Christmas Party Dec. 18..... 34
Chlorinated Rubber Under Rigid Control 5
Contract Distribution Div. Opens Youngstown Office..... 5
Cincinnati Paint Club Elects Bond President 61
Carpenter Made President of Indianapolis Paint Club..... 61

DCAT Annual Meeting November 18.. 3
Dow Chemical Issues Calcium Chloride Prices..... 4
Dry Color, Pigment Output in 1939 5

Ethyl Corp. to Substitute Hydrochloric for Chlorine..... 5
Export Managers to Meet..... 68

Golden Gate Paint Club Announces Free Courses 62
Garfienkel Co. Moves..... 67
Glycerin Prices Ceiled by OPA..... 3
Glycerin Ceiling Brings Rebellion.. 3

Hosken Made President of Cleve. Production Club 62

Illinois Trademark Law Now Requires Special Filing..... 74
Industrial Chemicals Exports..... 38

Lewistown Corp. Formed for Rare Pharmaceuticals 74

McHugh Named La. Oil Head..... 75
Margarin Production Decreased in August 41
Magruder Honored at NFA Dinner. 77
Merck & Co. Opens Analytical Laboratories 69

National Aniline Now Div. of Allied Chemical 5
N. D. Paint Chemists Hold October Meeting 61
N. Y. Production Club to Meet Nov. 6..... 5

OPA, Fertilizer Industry Parley Defense Problems..... 3

Phosphate Plant Being Build in Florida by International..... 77
Price-fixing Bill Vote Imminent.... 4
Protective Coatings Treatise Published 63
Paint Federation Meeting..... 45

Quaker Corp. Expands Plant..... 74

Richmond Guano Plant Destroyed by Fire 77

Soda Bicarbonate Prices Extended for 1942..... 35

Tanners Council Discusses Supplies, Production, Prices..... 3
Textile Chemists Year Book for 1941 Ready 39
Toluol Output by Shell to Reach 8,000,000 Gallons..... 39

U. S. Gypsum Has Lime Meeting Federal Specifications 79

Washington Talks It Over..... 5

Zinc Pool Quotas for November Set 3

General Features

Advertisers' Index..... 81
Bids Wanted..... 4
Chemical Price Trends..... 4
Classified Advertisements..... 80
Closing Market Developments.... 4
Contracts Awarded..... —
Corporation Earnings..... —
Defense Contracts Recently Awarded 76
Defense Materials Price Trend... 4
Dividends Declared..... —

Editorials 30
Foreign Trade Openings..... —
Foreign Trade Rules..... 79
Industrial Uses of Chemicals..... 36
Obituaries 4
OPD Price Index..... 4
Prices Current..... 7
Scientific, Professional Services... 76
Trade News Briefs.....72, 77
Washington Talks It Over..... 5
What You Can Use..... 74
Where You Can Sell..... 36

Market Reports

Botanical Drugs, Spices, Gums... 71
Coaltar Chemicals..... 38
Drugs and Fine Chemicals..... 65
Dyestuffs, Textile and Leather Chemicals 37
Essential Oils and Aromatics.... 73

Fertilizer Materials..... 77
Heavy Chemicals..... 32
Oils, Fats and Waxes..... 40
Paint, Varnish and Lacquer Materials 59
Petroleum Products..... 75

Shipping Information

Cargo Ship Arrivals..... —
Charters ..... —
Coastwise Shipments..... 79

Exports 79
Imports 78
Imports Detained..... 79

Chemical Index Record High

Bulging prices sent the chemical index number to a new all time high last week. Broad buying for both defense and civilian account, coupled with increasing diversion of production into industries concentrating on making implements of war, and substantial shrinkage of supplies available for use by non-defense manufacturers, were influences behind the flood of rising prices.

Ceiling prices were established on glycerin after weeks of study by OPA. Prompt protest against the prices set was filed by group of smaller soapers. One producer began writing 1942 contracts on ammonia carbonate and bicarbonate, using current prices. Contracts are subject to acceptance of quantities and delivery dates. Soda bicarbonate, monohydrated, and sal soda for 1942 delivery were also written at present prices. Stricter compliance control measures to prevent diversion of priority materials to other than defense purposes were expected to issue from OPM.

Higher prices were established on bay, cassia, crude and refined cottonseed, ginger, distilled lime, halibut, palm, pineneedle, rosemary, and sweet birch oils, buchu leaves, castor beans, cottonseed meal at Southeastern mills, dark blood and egg albumen, jalap root and lycopodium.

Lower quotations were set on arabic gum, corn, oiticica, peanut, and rapeseed oils, sago and tapioca flour, and soybean meal.

The result of the changes is shown in the *OPD Price Index* at the top of the column on the left.

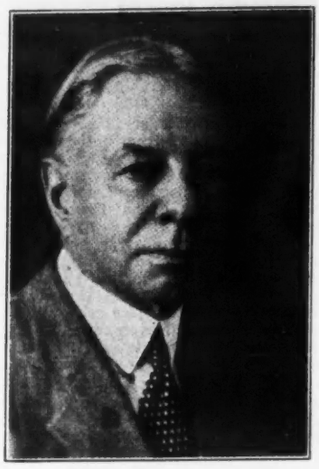
Oil, Paint and Drug Reporter, Volume 140, No. 18, November 3, 1941. Published weekly by Schnell Publishing Company, Inc., 59 John Street, New York, N.Y., U.S.A. Telephone: REctor 2-9820. Annual subscription price:—United States and possessions, Cuba, Mexico, Central America, and South America, $5; Canada and Newfoundland, $7; other countries, $10. Entered as second-class matter January 15, 1884, at the Post Office at New York, N. Y., under the act of March 3, 1879. Copyright, 1941, by Schnell Publishing Company, Inc.

Obituaries

H. P. Cavarly

Haywood P. Cavarly, who retired as an assistant manager of the Atlantic branch of National Lead Company in January of this year after fifty-one years of service, died October 29, at his home in Bayside, L. I. He was sixty-nine years old.

Mr. Cavarly began his career in 1890 in the office of the Atlantic



H. P. Cavarly

White Lead Company. He worked for several years in the laboratory and then became successively assistant superintendent and superintendent of the Atlantic Works in Brooklyn. Later he was made general superintendent of all Atlantic branch plants. He was appointed an assistant manager of the branch in 1928, continuing in that capacity until his retirement.

Surviving are his wife, a son and a daughter.

—*Continued on page* 79

Price-Fixing Bill Vote Imminent

OPD Washington Bureau
October 31, 1941

The price control bill of Representative Gore of Tennessee was rejected by the house banking and currency committee yesterday, but his proposal that all price-fixing legislation terminate on June 30, 1943, was adopted. The committee session continued today with a final vote on the bill not expected until late tonight at the earliest.

The most important development today was the rejection by a voice vote of a proposal of Representative Jessie Sumner of Illinois that ceiling prices on luxury items be eliminated. Miss Sumner said she had made the proposal in order that luxury prices might rise without hindrance, thus relieving the dollar supply pressure on essential commodities.

A vote is expected today on a proposal to prohibit Labor Department approval of any wage increase which would necessitate an increase in the ceiling price of a commodity.

Dow Chemical Issues Calcium Chloride Prices

Dow Chemical Company, Midland, Mich., has announced a new nationwide price schedule for calcium chloride, effective November 1. Several adjustments were made in the less than carload quantities, while revisions were made in certain packings due to increased costs.

The carload schedule for flake in paper bags ranges from $20.50 per ton in zone 1 to $35 per ton in zone 10; 5-ton lots, paper bags, range from $30.50 to $38; less car lots, 20 or more bags, from $1.78 per 100 pounds to $2.50 per 100 pounds; 4 to 19 bags, $2.03 to $2.75 per 100 pounds.

In burlap bags 12c. per 100 pounds is added for less car lots and $2.50 per ton added to larger quantities. Drum prices are 14c. per 100 pounds above paper bags and ton price is $3.50 higher.

Dry Color, Pigment Output in 1939

Production of dry colors and pigments in the United States was valued at $113,123,102 in 1939, compared with $119,343,264 in 1937, according to reports from eight-nine manufacturers to the Bureau of the Census. The statistics gives the value of materials made in the colors and pigments industry at $78,539,663; made as secondary products in the paints, varnishes, and lacquers industry, $7,764,730; made as secondary products in the primary smelting and refining of nonferrous metals industry, $14,441,174; made as secondary products in the coaltar products, crude and intermediate, and chemicals not elsewhere classified industries, $8,811,764; as secondary products in the printing ink industry, $977,924; as secondary products in the wallpaper industry, $59,496; as secondary products in other industries, $2,528,351. The following table shows the amount, value and kind made for sale:—

Product.	1939.	1937.
C.P. chrome yellows and oranges:—		
Pounds	26,674,752	*29,424,200
Value	$4,036,204	*$4,056,940
C.P. ironblues (Prussian blue):—		
Pounds	5,323,648	6,163,073
Value	$1,847,956	$2,188,230
C.P. chrome greens:—		
Pounds	6,982,524	7,743,979
Value	$1,547,649	$1,773,775
C.P. para toners:—		
Pounds	850,803	1,131,817
Value	$617,236	$849,381
C.P. lithol toners:—		
Pounds	2,291,314	2,471,182
Value	$1,308,471	$1,651,544
C.P. toluidine toners:—		
Pounds	594,507	.....
Value	$711,979	.....
Eosine and phloxine toners:—		
Pounds	138,858	.....
Value	$180,054	.....
Lake-red C. toners:—		
Pounds	346,933	.....
Value	$359,404	.....
Hansa-yellow toners:—		
Pounds	193,222	.....
Value	$263,929	.....
Methyl-violet toners:—		
Pounds	529,339	.....
Value	$487,639	.....
Lithol-rubine toners:—		
Pounds	138,952	.....
Value	$185,171	.....
Other red toners:—		
Pounds	648,536	393,856
Value	$505,842	$441,921
All other toners:—		
Pounds	1,360,801	.....
Value	$1,824,618	.....
Phosphotungstic-acid toners:—		
Blue:—		
Pounds	187,209	.....
Value	$529,157	.....
Green:—		
Pounds	101,860	.....
Value	$294,716	.....
Purple:—		
Pounds	102,310	100,854
Value	$189,018	$177,679
All other:—		
Pounds	131,421	.....
Value	$282,678	.....
Reduced chrome green:—		
Pounds	4,169,967	5,963,171
Value	$357,548	$542,632
Reduced inorganic toners:—		
Pounds	757,249	1,032,386
Value	$100,528	$135,760
Reduced organic reds:—		
Pounds	797,008	848,386
Value	$216,167	$248,813
All other reduced organic toners:—		
Pounds	580,477	.....
Value	$344,800	.....
All phosphotungstic-acid lakes:—		
Pounds	617,286	.....
Value	$443,483	.....
Coaltar color lakes:—		
Peacock blue:—		
Pounds	751,552	884,411
Value	$444,235	$490,041
Persian orange:—		
Pounds	215,661	.....
Value	$83,144	.....
Scarlet 2R:—		
Pounds	743,054	.....
Value	$210,695	.....
Alizarine:—		
Pounds	90,172	.....
Value	$107,615	.....
Azo bordeaux:—		
Pounds	315,465	.....
Value	$94,087	.....
Pigment scarlet:—		
Pounds	373,679	.....
Value	$176,799	.....
Lithol rubine:—		
Pounds	344,779	.....
Value	$108,776	.....
All other:—		
Pounds	2,548,289	2,400,623
Value	$933,162	$1,135,063

—Continued on page 62

Contract Distribution Div. Opens Youngstown Office

OPD Washington Bureau
October 30, 1941

Contract Distribution Division of the Office of Production Management has opened an office in 1002 Union National Bank building, Youngstown, Ohio, to help manufacturers obtain defense work. This brings the total number of its field offices to fifty-four.

Washington Talks It Over

Observations • Prognostications • Developments

By OPD Observer

World War I was sometimes referred to as a war of chemists because of the use of gases. The current war is becoming known as a physicists' war. Nations are working desperately to develop superior plane and submarine detectors, magnetic mines and defense against such mines, bomb sights, and fire-control apparatus. After the war physics may have a peacetime play equal to that of industrial chemistry in the '20's. The U. S. government is marshalling the research facilities of the nation, and exchanging problems and findings with the British. To the National Inventors' Council at the Patent Office come thousands of ideas from amateur and professional inventors. A large percentage are "nut" ideas—obviously worthless, while another large group is old stuff. But here and there is a brilliant idea worth further study, and the researchers go to work on it.

Little is ever heard of the Office of Scientific Research and Development because it works on nothing but military secrets, but it has mobilized the research staffs of dozens of university and industrial laboratories. When the war is over, much of this military research undoubtedly will find commercial application in startling new gadgets.

Phenol Blocks Nylon

Shortages in a war period have a habit of feeding upon themselves and upon substitute commodities which are brought into play. When shipments of Japanese silk were cut off, nylon was expected to meet part of the silk stocking demand. Now officials aren't nearly so sure. At Charlestown, W. Va., a big new nylon plant stands 85 percent completed, but defense officials aren't sure they should grant priorities to put the factory into production. If it is finished, its operation would be dependent upon the supply of phenol which is becoming so scarce that officials fear there will not be sufficient nondefense supply to keep present nylon plants operating. The whole phenol picture has turned around since the Russians requested large shipments. DuPont is ready to build another phenol plant, but that will take a year perhaps—and, anyway, one of the two ways for making phenol calls for large quantities of chlorine.

That Gasoline Shortage

Harold Ickes never does things half way. When the British returned enough tankers to make it probable that the East coast could get by without a severe shortage of petroleum products, Ickes immediately ordered lifting of all restrictions and the end of all voluntary conservation efforts. Chagrinned at the unpopularity of his fuel-saving program, Ickes says he never again will ask the American public to do anything. But he figures—and the experts agree—that not only the East coast but perhaps the whole country may be pinched for fuel oil and gasoline if any of several eventualities develop. Then, Ickes swears, he won't do a thing about it—just let the people freeze and run out of gas and wish they had listened to Ickes last Summer.

Bright Work Dimmed

OPM officials were much disappointed when they saw the 1942 model automobiles because the Detroit designers had not done a very good job of conserving strategic metals and substituting something else, although OPM has been preaching this gospel to industry generally. So now, most of the "bright-work" has been ordered off cars after New Year's Day. This will save some nickel, chromium, and aluminum for other uses; will reduce the amount of plating chemicals used by the auto industry; increase markets for plastics, lacquers, and enamels in auto decoration.

Colors, Tones, and Shades

World War I created grave shortages of industrial dyes in the United States, a situation which resulted in a tremendous growth of a domestic dye industry. World War II has brought most of the textile industry of the non-axis world to our doorstep seeking dyes, in spite of much support for British exports by production expansion in the United Kingdom. Defense officials say they foresee no serious overall shortage, although some colors and shades are likely to become hard to get.

Suspensions and Seizures

OPM is readying its S orders. These will be handed out by the compliance section of the priorities division to concerns which do not behave according to what has to be done with prioritized stuff. The aluminum cut-off of two weeks ago is the modus operandi. S stands for suspension, and those upon whom priority wrath descends will be suspended out of the material misused for six months or, might be, a whole year.

OPA is getting set up to hand out similarly drastic medicine to those who do not abide by price boundaries—in case Congress falls down or short on the furnishing of statutory control. OPA will not put suspenders on recalcitrants: its weapon is a halter. A concern that goes price happy will find itself obliged quite forcibly under that hard handed No. 1 order to accept a defense order for all the goods it has at a price fixed by OPA. In addition, the property seizure law will be brought into action against the uncooperative with almost any degree of consequential devastation.

Export License Pressure

Through its affidavit system, the Office of Export Control attempts to limit shipments to South American countries to actual needs, usually not in excess of earlier years imports, and to prevent shipments from getting into the hands of suspected dealers south of the border. At times, but not uniformly, this operates to keep legitimate newcomers out of the export business.

One new chemical company having this trouble successfully worked a squeeze-play on the government. It refused to bid on government requests to purchase a scarce chemical of which it is one of the few manufacturers, and, when pressed, it explained that it has been unable to get licenses to export a different product to South America, a drug which it has only recently started to manufacture in competition with a few older concerns, even though this company is the only one in business using South American raw materials. When the army needed the first product badly enough, it offered some quid pro quo and after using a lot of pressure it induced the OEC to give the company export licenses for its drug.

Export Profiteering

A number of the chemical price profiteers and priority racketeers whose activities have upset OPA have found a fertile field of operation in the pressing wants of Latin American customers. Nor is the practice confined to chemical exporters. Exorbitant prices on exports not only injure the Good Neighbor Policy, but they upset domestic price and supply factors and enrage competitors who are unable to obtain sufficient materials to fill orders of their established foreign customers.

Now OPA has interested the reorganized Office of Export Control in the problem, with the result that a system is being devised to check ex-

—Continued on page 72

Chlorinated Rubber Under Rigid Control

OPD Washington Bureau
October 29, 1941

All stocks and sales of chlorinated rubber were today placed under rigid priority control in General Preference Order M-46, issued by Donald M. Nelson, Director of Priorities. Producers of chlorinated rubber are directed to make deliveries only as ordered by the Director of Priorities, and the term "producer," defined in the order, includes all who have the rubber processed for them under toll agreement, or who have purchased it for resale, in addition to those engaged in its primary production.

Chlorinated rubber is produced by the Hercules Powder Company and the Firestone Tire & Rubber Company, and is usually ordered by the trade names of 'Parlon' and 'Raolin.'

Ethyl Corp. to Substitute Hydrochloric for Chlorine

The Ethyl Gasoline Corporation by substituting hydrochloric acid for chlorine in the manufacture of tetraethyl lead it will make over 1,000,000 cubic feet of chlorine gas available daily to ease national shortages in this chemical. Raw materials consumed by the manufacture of hydrochloric acid will be common salt and sulphuric acid. Large quantities of salt, and sulphur to make acid, are mixed near Ethyl's Baton Rouge manufacturing plants. The company's hydrochloric plant will be completed next Summer.

Ethyl's chlorine-sodium plant, operated by the R&H chemicals department of E. I. du Pont de Nemours & Co., has been running at full capacity since chlorine shortages first developed in order to replenish dwindling stores at other points. Designed for the production of chlorine gas, however, the plant has only limited facilities for liquefying, and chlorine can be shipped only when converted to liquid form.

Machinery to liquefy all chlorine produced will be installed on rush orders, to be completed by the time the hydrochloric acid plant is ready to supply needs of tetraethyl lead manufacture. The capacity of the chlorine plant will be increased by the addition of a new wing, also expected to go into operation next Spring.

Hydrochloric acid does not enter the tetraethyl lead reaction, but is used in the manufacture of an intermediate, ethyl chloride. Most industries using chlorine cannot utilize hydrochloric acid as a substitute, it is pointed out. The particular chemistry of the tetraethyl lead industry permits this substitution. Construction of additions to Ethyl's Baton Rouge plants at a cost of $2,500,000 will be speeded with the aid of government priorities that rate this project as vital to national defense.

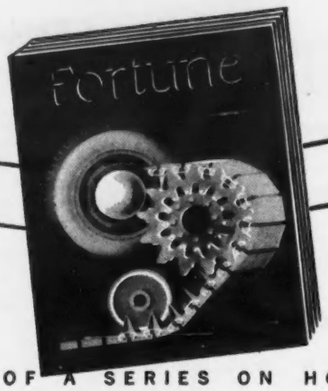
National Aniline Now Div. of Allied Chemical

The National Aniline and Chemical Company, a subsidiary of the Allied Chemical & Dye Corporation, this city, is being merged with the parent company and its business will be conducted as the National Aniline and Chemical division of Allied.

B. A. Ludwig, president of National Aniline and E. W. Clark, president of the Barrett Company, another Allied Chemical subsidiary, have been appointed vice-presidents of Allied Chemical.

N.Y. Production Club To Meet November 6

A review of the prize-winning papers at the Chicago convention will feature the monthly dinner meeting of the New York Paint and Varnish Production Club, to be held November 6 at the Building Trades Employers building, 2 Park avenue, this city. Speaker of the evening will be Dr. A. R. Lukens, director of research for Thompson, Weinman & Co., who will discuss "Calcium Carbonate Inerts in Paints."



AN IMPORTANT MESSAGE

REPRINTED FROM NOVEMBER, FORTUNE

ONE OF A SERIES ON HOW MAGNUS, MABEE & REYNARD, INC., SERVES INDUSTRY

WHAT IS AN *Essential* OIL?

DEFINITION OF AN ESSENTIAL OIL

A volatile oil distilled from the plant, leaf, flower, etc. to which it imparts the characteristic odor or flavor.

67 INDUSTRIES BUY $20,000,000 OF ESSENTIAL OILS ANNUALLY TO FLAVOR EVERYTHING FROM CANDY TO "HOT DOGS"... TO PERFUME COSMETICS OR FLY SPRAYS ... TO DEODORIZE PAINTS AND CLEANSING POWDERS

WHAT builds brand preference? Advertising, of course! — and a better product; and merchandising ideas that "jump the gun" on competition ... *and that unsung work-horse of American industry — ESSENTIAL OILS!*

But why ESSENTIAL OILS? Because through the medium of essential oils new flavor sensations are born, exciting fragrances created, objectionable odors of basic ingredients eliminated.

Through this medium, Concentrated Spice Oils, *more precious than Marco Polo's fabulous treasure,* are distilled from natural spices to provide the canner of meats and soups, the pickle and condiment packer with the priceless asset of uniform and identical flavoring and seasoning *regardless what the season.*

To American industry beset by war shortages of such widely used Essential Oils as Otto of Rose from Bulgaria, Oil of Lavender from France, Bergamot from Italy, Camphoraceous products from Japan and numerous others, *the Essential Oil Industry* has brought scientific replacements that make possible the *maintenance* of product identity and individuality.

All this and more ... *a world of possibilities for the baker and candlestick maker* ... is the contribution of the *ESSENTIAL OIL INDUSTRY.*

MM&R ESSENTIAL OILS

Basic Perfume and Flavor Materials • Balsams

TO HELP BUILD PRODUCT PREFERENCE

As one of the world's leading suppliers of Essential Oils and kindred products, Magnus, Mabee & Reynard, Inc., is proud of its unheralded role in helping to build product preference for many of the nation's best known brands.

For almost a half century, MM&R has cooperated with producers in the food, drug, cosmetic, confectionery, soft drink, soap, insecticide and many other industries. During today's more difficult times, this cooperation can be of greater aid than ever before. The technical division of MM&R will be happy to cooperate without obligation.

M&R MAGNUS

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895 ... ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK CITY • 221 NORTH LASALLE STREET, CHICAGO

Current Market Quotations

October 31, 1941

All matter under this heading fully protected by copyright

Unless otherwise indicated, quotations are first-hands on large lots, f.o.b. New York. Price changes, trends, and resale prices are noted in the market reports, with other informative comment. The locations of the several reports is indicated on page 4.

RECEIVED NOV 3 1941 LIBRARY THE CHEMISTS CLUB

Defense Status of Materials

Application of SPAB regulations to materials listed below is indicated by superior figures as follows:—[1] Price Ceiling; [2] Price Suggestion or Agreement; [3] Full Priority Control; [4] Industry Control; [5] General Limitation Order; [6] Critical List (Army and Navy Munitions Board).

A

Acacia (see Gum, arabic).
Acetal, cbys., works.....lb. 1.00 - 1.50
Acetaldehyde, 99%, dms., 55 and 110 gls., works..lb. .11 - —
5 and 10 gls., works.....lb. .14 - —
Acetamide, CP, kgs., 5,000 lbs. a year, works..lb. .36 - —
200-lb. lots, works.....lb. .38 - —
100-lb. lots, works.....lb. .55 - —
5 to 50-lb. lots, works....lb. .70 - —
tech., kgs., 5,000 lbs. a year, works..lb. .28 - —
200-lb. lots, works.....lb. .30 - —
100-lb. lots, works.....lb. .45 - —
5 to 50-lb. lots, works....lb. .50 - —
Acetanilide, tech., cryst., bbls.lb. .29 - .31
powd., bbls.....lb. .27 - .29
USP, cryst., bbls., 2,000-lb. lots, lb. .32 - —
smaller lots.....lb. .33 - —
dms., 25-lb. lots.....lb. .38 - —
kgs., 2,000-lb. lots.....lb. .33 - —
smaller lots.....lb. .34 - —
powd., bbls., 2,000-lb. lots..lb. .30 - —
smaller lots.....lb. .31 - —
dms., 25-lb. lots.....lb. .36 - —
kgs., 2,000-lb. lots.....lb. .31 - —
smaller lots.....lb. .32 - —
Acetoacetanilide, dms.....lb. .47 - .65
Acetone, CP,[1,6] dms., c.l., dlvd.lb. .08½- —
l.c.l., dlvd.....lb. .09 - —
tanks, dlvd.....lb. .07 - —
Methyl (see M).

* The term 'Eastern' territory means the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof, and the term 'Western' territory shall mean all other States of the United States.

Acetonitrile, dms., works.....lb. 1.00 - 2.00
Acetophenone, cns., dms.....lb. 1.55 - 1.60
Acetophenetidin, bbls., kgs., 1,000 lbs..lb. 1.00 - —
50 lbs., dms.....lb. 1.08 - —
25 lbs., dms.....lb. 1.10 - —
Acid, abietic, dms., c.l., f.o.b. all points in U.S. E. of and including Kans., Neb., N.D., Okla., S.D., Tex. E. of Austin and Brownsville...lb. .06¾- —
Acetic,[1] com'l or redist., 28%, bbls..100 lbs. 3.19 - 3.43
cbys., cs.....100 lbs. 3.68 - 3.93
56%, bbls.....100 lbs. 5.18 - 5.43
cbys., cs.....100 lbs. 5.68 - 5.93
70%, bbls.....100 lbs. 6.19 - 6.44
cbys., cs.....100 lbs. 6.69 - 6.94
80%, bbls.....100 lbs. 6.91 - 7.16
cbys., cs.....100 lbs. 7.41 - 7.66
glacial, nat., CP, cbys.100 lbs.14.25 -15.25
99.5%, bbls.....100 lbs. 8.30 - 8.55
cbys.....100 lbs. 8.80 - 9.05
tanks.....100 lbs. 7.25 - —
USP, cbys.....100 lbs.11.00 -12.50
synth., 99.5%, al. dms, works, 100 lbs. 8.45 - 8.70
tanks, dlvd.....100 lbs. 6.25 - —
USP XI, al. dms., works, 100 lbs.10.25 -11.00
CP, dms., works.....100 lbs.13.50 -14.25
pure, 30%, bbls.....100 lbs. 4.23 - 4.48
cbys., cs.....100 lbs. 4.73 - 4.98
36%, bbls.....100 lbs. 4.61 - 4.86
cbys., cs.....100 lbs. 5.11 - 5.36
60%, bbls.....100 lbs. 7.17 - 7.42
cbys., cs.....100 lbs. 7.67 - 7.92
80%, bbls.....100 lbs. 8.70 - 8.95
cbys., cs.....100 lbs. 9.20 - 9.45

Acetic acid price differentials above are for c.l. and l.c.l. quantities, the prices apply delivered within the Metropolitan zones unless otherwise indicated in the above prices.

Acetic, anhydride,[2] dms., c.l., frt. alld..lb. .11½- —
l.c.l., dms., frt. alld.....lb. .13 - —
Acetylsalicylic, special, USP, fine cryst., gran.. 200-lb. bbls.lb. .45 - —
standard, USP, fine cryst., gran., 20 or 40 mesh, 200-lb. bbls..lb. .40 - —
powd., 80 mesh, 200-lb. bbls. lb. .40 - —
Adipic, fib. dms., works.....lb. .31 - —
Anthranilic, refd., bbls.....lb. 1.15 - 1.20
tech., bbls.....lb. .75 - —
Arsenous, tech. (see Arsenic, White).
USP, powd., dms., kegs....lb. .20 - .22
Ascorbic, bots., dms.....oz. 1.85 - 2.10
Battery, cbys., c.l., E. works, 100 lbs. 1.60 - —
l.c.l., 25 or more, E. works, 100 lbs. 1.85 - —
10-25, E. works....100 lbs. 1.95 - —
1-9, E. works.....100 lbs. 2.55 - —
Benzoic, tech., bbls., 4,000 lbs. or more..lb. .43 - —
1,000 to 3,900 lbs.....lb. .44 - —
900 lbs. or less.....lb. .47 - —
USP, bbls., 4,000 lbs. or more. lb. .54 - —
1,000 to 3,900 lbs.....lb. .55 - —
900 lbs. or less.....lb. .58 - .59
dms., 4,000 lbs. or more..lb. .55 - .56
1,000 to 3,900 lbs.....lb. .56 - .57
99 lbs. or less.....lb. .59 - .60
Acid, boric, tech., 99.5%, gran., bulk, frt. alld..ton.93.50 - —
bgs., c.l., frt. alld...ton.96.00 - —
ton lots, ex-whse...ton.108.00 - —
less than ton lots, ex whse..ton.118.00 - —
bbls., c.l., frt. alld..ton.106.00 - —
ton lots, ex whse..ton.118.00 - —
less than ton lots, ex whse..ton.123.00 - —
powd., bgs., c.l., frt. alld. ton.101.00 - —
ton lots, ex whse..ton.113.00 - —
less than ton lots, ex whse..ton.118.00 - —
bbls., c.l., frt. alld..ton.111.00 - —
ton lots, ex whse..ton.123.00 - —
less than ton lots, ex whse..ton.128.00 - —
USP $25 per ton higher.
Butyric, 90%, dms., c.l., S. Charleston, W. Va..lb. .22 - —
l.c.l., same basis.....lb. .23 - —
tanks, same basis. .....lb. .21 - —
Broenner's, bbls.....lb. 1.11 - —
Camphoric, cns.....lb. 6.95 - 7.00
Capric, dms.....lb. .19¾- .20¼
Caproic, dms., works.....lb. .23 - .30
Caprylic, dms.....lb. .27 - .27½
Castor oil, split, dms.....lb. .18¼- .18¾
Chlorosulphonic, dms., c.l., wks. lb. .03 - —
5-drum lots, works.....lb. .03½- —
single drum.....lb. .04½- —
tanks, works.....lb. .02½- —
Chromic,[2,5] 99%, dms., c.l., dlvd. N. Y..lb. .16¼- —
l.c.l., 5 tons, dlvd. N.Y. lb. .16¾- —
smaller quantities, dlvd. N. Y..lb. .17¼- .18¼
Cinnamic, refd., bots.....lb. 3.50 Nom.
Citric, cryst., gran., bbls., car lots..lb. .20 - —
10,000-lb. lots, one shipt. lb. .20¼- —
smaller lots.....lb. .21 - —
anhydr. gran., dms., 10,000 lbs., one shipt..lb. .23 - —
smaller lots.....lb. .23½- .26½

Citric acid quotations on powder are ½c. higher than on granular. Keg packing is ½c. higher than barrels. Prices are f.o.b. N.Y. Chicago and St. Louis deliveries are ½c. higher than N.Y.

Cleve's, bbls.....lb. .65 - —
Coconut oil, dist., dms.....lb. .16¾- .17¼
Cottonseed oil, dist., dms....lb. .14 - .14½
tanks .....lb. .13½- —
Cresylic (coaltar),[6] high-boil 50%, 210°-215°, dms., c.l., works, frt. equald..gal. .76 - .81
l.c.l., same basis....gal. .78 - .83
special blends (50, 210°-215°), dms., c.l., works, frt. equald..gal. .76 - .81
l.c.l., same basis....gal. .78 - .83
low-boil (50%, 204°-206°), dms., c.l., works, frt. equald..gal. .76 - .81
l.c.l., same basis....gal. .78 - .83
special blends (50%, 204°-206°), dms., c.l., works, frt. equald..gal. .76 - .81
l.c.l., same basis.....gal. .78 - .83
imported, pale, dms...gal. No price
Cresylic (petroleum), high-boil (240°-300°), 20 or more dms., works..gal. .61 - —
1-19 dms., works.....gal. .63 - —
tanks, dlvd., East. U.S.gal. .58 - —
medium-boil (222°-249°), 20 or more dms., works.gal. .67 - —
1-19 dms., works.....gal. .69 - —
tanks, dlvd., East. U.S.gal. .64 - —
Diethylbarbituric (see Barbital).
Formic, dom., 90%, cbys., c.l., works..lb. .10¼- —
l.c.l., 25 cbys. and over.lb. .11 - —
1-24 cbys.....lb. .11½- —
Fumaric, tech., special, bbls., ton lots..lb. .27 - —
smaller lots, bbls., dms...lb. .28 - .31
Gallic, tech., bbls.....lb. 1.05 - 1.08
NF VI, bbls., 200 lbs., 5 or more..lb. 1.22 - —
smaller lots.....lb. 1.23 - —
fib. dms., 25 lbs.....lb. 1.29 - —
Gamma, bbls.....lb. .65 - —
Gluconic, tech., 50%, bbls., 500 lbs..lb. .12 - —
100-lb. kgs.....lb. .15 - —
25 or 50-lb. demij.....lb. .21 - .23
5-lb. bots.....lb. .29 - —
H. bbls.....lb. .45 - —
Hydriodic, 45-47%, cbys.....lb. 2.42 - 2.44
5-lb. bots.....lb. 2.57 - —
57%, bots.....lb. 2.90 - —
Hydrobromic, 10% dilute, cbys., lb. .20 - —
concentrated, 34%, cbys....lb. .35 - —
Hydrochloric (see Muriatic).
Hydrocyanic, cyls., works....lb. .80 - 1.00
Hydrofluoric, 30%, bbls.....lb. .06 - .06½
rubber, dms.....lb. .08 - .08½
48%, lead, cbys.....lb. .12 - —
rubber, dms.....lb. .11 - —
52%, lead, cbys.....lb. .13 - —
rubber, dms.....lb. .12 - —
60%, lead, cbys.....lb. .14 - —
rubber, dms.....lb. .13 - —
Hydrofluosilic, 30-33%, 420 lbs.. bbls..lb. .09 - .09½
Acid, hypophosphorus, USP, 30%, djns..lb. .75 - .80
Lactic, tech., dark, 22%, bbls., c.l., works..100 lbs. 2.50 - —
l.c.l., works.....100 lbs. 2.75 - —
cbys., works...100 lbs. 3.75 - —
44%, bbls., c.l., works.... 100 lbs. 5.50 - —
l.c.l., bbls., works.... 100 lbs. 5.75 - —
cbys., works...100 lbs. 6.75 - —
light, 22%, bbls., c.l., works, 100 lbs. 3.50 - —
l.c.l., works.....100 lbs. 3.75 - —
cbys., works...100 lbs. 4.75 - —
44%, bbls., c.l., works.... 100 lbs. 6.50 - —
l.c.l., works.....100 lbs. 6.75 - —
cbys., works...100 lbs. 7.75 - —
50%, edible, 20 or more, cbys..lb. .10¼- .11½
5 to 19 cbys.....lb. .11 - .12
1 to 4 cbys.....lb. .11½- .12½
plastic grade, bbls., cbys., 20 or more..lb. .12¼- .13½
5 to 10, cbys.....lb. .12¾- .13⅝
1 to 4, cbys.....lb. .13¼- .14½
80%, bbls., cbys., 5 or more.lb. .21 - .22
1 to 4, cbys.....lb. .21½- .22½
USP, XI, 85%, cbys.....lb. .50 - .53
USP, VIII, 75%, cbys.....lb. .48 - .51
Lauric, dist., tech., dms....lb. .18¼- .18¾
Laurent's, bbls.....lb. .45 - —
Linseed oil, light, dms.....lb. .17 - .17½
Maleic, powd., dms.....lb. .30 - —
anhydride, dms., c.l.....lb. .25 - —
l.c.l. .....lb. .28 - —
Malic, powd., kegs.....lb. .47 - —
Mandelic, dms., 1,000 lbs....lb. 2.05 - —
smaller lots.....lb. 2.10 - 2.15
Mixed, tanks, nitric unit....lb. .05 - .06
sulphuric unit.....lb. .0085- .009
Molybdic, kegs, works.....lb. .95 - 1.10
Monochloracetic, tech., bbls..lb. .15 - .18
Monosulphonic, bbls.....lb. 1.50 - —
Muriatic, 18°, cbys., c.l., E., works..100 lbs. 1.50 - —
l.c.l., 25 and over E. works..100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, works.....100 lbs. 1.05 - —
20°, cbys., c.l., E. works. 100 lbs. 1.75 - —
l.c.l., 25 and over, works. 100 lbs. 2.00 - —
10 to 24, works...100 lbs. 2.10 - —
1 to 9, works...100 lbs. 2.70 - —
tanks, works.....100 lbs. 1.15 - —
22°, cbys., c.l., E. works. 100 lbs. 2.25 - —
l.c.l., 25 and over, works. 100 lbs. 2.50 - —
10 to 24, works...100 lbs. 2.60 - —
1 to 9, works...100 lbs. 3.20 - —
tanks, works.....100 lbs. 1.65 - —
CP, dealers, cbys.....lb. .06½- —
6-lb. bots.....lb. .17½- —
consumers, cbys.....lb. .08 - —
6-lb. bots.....lb. .19 - —
Myristic, dist., dms.....lb. .18 - .18½
Naphthenic, dom., acidity 220-230, dms., c.l., works..lb. .10 - —
l.c.l., works.....lb. .11 - —
tanks, works.....lb. .09 - —
233-245 acidity, dms., c.l., works..lb. .12 - —
l.c.l., works.....lb. .13 - —
tanks, c.l., works.....lb. .11 - —
Nicotinic, 100-lb. cns.....lb. 7.15 - —
50-lb. cns.....lb. 7.25 - —
25-lb cns.....lb. 7.30 - —
5-lb. bots.....lb. 7.46 - —
1-lb. bots.....lb. 7.50 - —
Nitric, 36°, cbys., c.l., E. works. 100 lbs. 5.00 - —
l.c.l., 25 and over, E. works..100 lbs. 5.25 - —
10 to 24, works...100 lbs. 5.35 - —
1 to 9, works...100 lbs. 5.95 - —
38°, cbys., c.l., E. works. 100 lbs. 5.50 - —
Western works...100 lbs. 5.75 - —
l.c.l., 25 and over, E. works..100 lbs. 5.75 - —
10 to 24, works...100 lbs. 5.85 - —
1 to 9, works...100 lbs. 6.45 - —
40°, cbys., c.l., E. works. 100 lbs. 6.00 - —
l.c.l., 25 and over, E. works..100 lbs. 6.25 - —
10 to 24, works...100 lbs. 6.35 - —
1 to 9, works...100 lbs. 6.95 - —
42°, cbys., c.l., E. works. 100 lbs. 6.50 - —
l.c.l., 25 and over, works. 100 lbs. 6.75 - —
10 to 24, works...100 lbs. 6.85 - —
1 to 9, works...100 lbs. 7.45 - —
CP, USP, dealers, cbys.....lb. .11½- —
7-lb. bots.....lb. .21½- —
consumers, cbys.....lb. .13 - —
7-lb. bots.....lb. .23 - —
Oleum (see sulphuric fuming).
Oxalic, dom., bbls., c.l., works, lb. .11¼- —
10,000 lbs. or over.....lb. .11¼- —
smaller quantities.....lb. .12¾- .14½

Acacia—Acrylonitrile

Acid, palm oil, white, dist., dms..lb. .13¾- .14¼
tanks .....lb. .13¼- —
Paraminobenzoic, cns.....lb. 1.40 - —
Paranitrobenzoic, cns.....lb. .72 - —
Phenylacetic, bots.....lb. 1.85 Nom.
Phosphoric, 50%, pure food grade, c.l., bbls., works, frt. equald.... 100 lbs. 4.00 - 4.25
cbys., works, frt. equald. 100 lbs. 4.35 - 4.60
l.c.l., 10 or more, works, frt. alld.100 lbs. 5.25 - 6.26
1 to 9 cbys., works, frt. alld..100 lbs. 6.25 - 7.26
tankwagons, dlvd., N.Y., Phila. Met. area..... 100 lbs. 4.00 - —
75% pure food grade, c.l., bbls., works, frt. equald. 100 lbs. 4.75 - 5.00
cbys., works, frt. equald. 100 lbs. 5.10 - 5.35
l.c.l., 10 or more, works, frt. alld.100 lbs. 7.00 - 8.50
1 to 9 cbys., works, frt. alld..100 lbs. 8.00 - 9.50
tankcars, works, frt. equald..100 lbs. 4.00 - 4.26
tankwagons, dlvd., N.Y., Phila. Met. area..... 100 lbs. 4.75 - —
USP, 85%, s. g., 1.710 cbys., 180 lbs..lb. .12 - —
50%, s. g., 1.347, cbys., 70 lbs..lb. .10½- —
dms., 25 lbs.....lb. .13 - —
10%, dilut., cbys., djns...lb. .07 - .07⅛
Picramic, kgs.....lb. .65 - .70
Picric, bbls.....lb. .35 - —
Propionate, synth., pure, 55-gal. dms., returnable, works..lb. .14 - —
tanks, works.....lb. .11 - —
Pyrogallic, tech., lump, powd., bbls..lb. 1.35 - —
cns. .....lb. 1.53 - —
USP, cryst., cns.....lb. 2.00 - —
resub., cns.....lb. 2.50 - —
Pyroligneous, bbls., dlvd. E.gal. .25 - —
Ricinoleic, com'l, split (see Acid, castor oil, split).
tech., dms., works.....lb. .32 - .37
Salicylic, tech., bbls.....lb. .33 - —
USP, bbls.....lb. .35 - .38
Sebasic, tech., bbls., works..lb. .62 - —
Soybean oil, dist., dms.....lb. .17½- .18
Stearic, dist., double pressed, bgs., dlvd..lb. .14¼- .15½
single pressed, bgs., dlvd..lb. .13¾- .14¾
triple pressed, bgs., dlvd..lb. .17 - .18
saponif., double pressed, bgs., dlvd..lb. .14½- .15½
triple pressed, bgs., dlvd..lb. .17¼- .18¼
Succinic, bbls.....ib. .75 - —
Sulphanilic, CP, bots., works.lb. 1.60 - 1.63
tech., dms., works.....lb. .17 - —
Sulphuric, 60°, cbys., c.l., E. works..100 lbs. 1.25 - —
l.c.l., 25 and over, works, 100 lbs. 1.50 - —
10 to 24, works...100 lbs. 1.60 - —
1 to 9, works...100 lbs. 2.20 - —
tanks, E., works.....ton.13.00 - —
66°, cbys., c.l., E. works, 100 lbs. 1.50 - —
l.c.l., 25 and over, works, 100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, E., works.....ton.16.50 - —
98°, tanks, works.....ton.17.50 - —
CP, USP, dealers, cbys.....lb. .06½- —
9-lb. bots.....lb. .15½- —
consumers, cbys.....lb. .08 - —
9-lb. bots.....lb. .17 - —
fuming, 20%, tanks, E. works. ton.19.50 - —
Tannic, tch., bbls., dms....lb. .66 - .68
USP, fluffy, bbls., 1,000-lb. lots..lb. 1.13 - —
100-lb. lots.....lb. 1.15 - —
25-lb. lots.....lb. 1.18 - —
powd., bbls., 1,000 lbs....lb. 1.03 - —
smaller lots.....lb. 1.05 - —
Tartaric, USP, dom., cryst., gran., powd., bbls., 10,000 lbs. or more, one shipt...lb. .70½- —
smaller quantities.....lb. .71 - —
kgs. .....lb. .71½- —
Tobias, bbls.....lb. .55 - .60
Trichloracetic, bots.....lb. 2.00 - 2.50
Tungstic, CP, 100-lb. pkg....lb. 2.94 - 3.10
pure, 100-lb. pkg.....lb. 2.88 - —
Aconite, leaves, bls.....lb. No stocks
Root, bls.....lb. No stocks
Aconitine, amorph., bots.....oz.28.00 -28.00
15-gr. vials.....vial. 1.00 - —
cryst., bots.....oz.42.00 - —
15-gr. vials.....vial. 1.60 - —
Acrylonitrile, dms., c.l.....lb. .34½- —
5,000 lbs. or more.....lb. .35 - —
1 ton to 4,999 lbs.....lb. .35½- —
1 dm. to 1 ton.....lb. .36 - —
tank cars.....lb. .34 - —

Adeps Lanae—Belladonna

Adeps lanae, anhyd., dms.....lb. .23 - .25
hyd., dms.....lb. .22 - .23

Agar, Kobe No. 1, strip.....lb. 2.00 - 2.10
gran., fib, dms.....lb. 2.45 - —
powd., fib dms.....lb. 2.50 - —
Kobe No. 3 strip, bls.....lb. 1.75 - —

Agaric, white, bls.....lb. No stocks

Albumen, blood, dark, flake, c.l., f.o.b. Chicago, frt. alld..lb. .11½- —
ton lots, frt. alld.....lb. .12½- —
bgs., same basis.....lb. .13½- .15½
light, dom., flake, dms., f.o.b. Chicago, frt. alld..lb. .65 - .75
import. bgs.....lb. No prices

Egg, ed., dom., cryst., bbls..lb. 1.75 - 1.80
powd., dms., bbls.....lb. 1.80 - 1.85
import, cs.....lb. 1.75 - 1.80

Alcohol, amyl (see also Fuse. oil, refd.), ex pentane, dms., c.l., frt. alld..lb. .131 - —
l.c.l., frt. alld.....lb. .141 - —
tanks, frt. alld.....lb. .121 - —
normal, dms., l.c.l., works..lb. .27 - —
Tertiary, refd., dms., l.c.l., frt. alld..lb. .09 - —
Benzyl, cns.....lb. .65 - .75
drums.....lb. .63 - —
Butyl, normal,[1] dms., c.l., frt. alld..lb. .11 - .11¾
l.c.l., frt. alld.....lb. .11½- .12¼
tanks, frt. alld.....lb. .10 - .10¾

* The term 'Eastern' territory means the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof, and the term 'Western' territory shall mean all other States of the United States.

secondary, dms., c.l., frt. paid E. of Miss. R..lb. .09 - —
l.c.l., same terms.....lb. .09¼- —
tanks, same terms.....lb. .08 - —
tertiary, denaturing, c.l., dms. lb. .12½- —
l.c.l., dms.....lb. .13 - —

Cetyl, dom., CP, fiber ctns., 1,000 lbs..lb. 1.50 - —
500 lbs.....lb. 1.70 - —
100 lbs.....lb. 1.80 - —
25 lbs.....lb. 1.90 - —
5 lbs.....lb. 2.00 - —

Cinnamic, bots.....lb. 3.00 - 3.60

Denatured,[1,2,3] CD14, dms., c.l., dlvd., E..gal. .38½- —
l.c.l., dlvd., dms.....gal. .43½- —
tanks, E., dlvd.....lb. .32½- —

Prices for territories other than E. of Rockies are 4c. per gal. in tanks, and 5c. per gal. in dms., higher. Tankcar sales require written authorization by Alcohol Tax Unit.

SD1 190 pf., bbls., c.l., E. works..gal. .35½- —
19 bbls., E. works..gal. .37½- —
1 to 18 bbls., E. works..gal. .40½- —
dms., c.l., E. works...gal. .33½- —
19 dms., E. works...gal. .35½- —
1 to 18 dms.....gal. .38½- —
tanks, E. works.....gal. .27½- —

Anhydrous 3c. per gal. higher.

SD2B, dms., c.l., works, E. gal. .30½- —
19 dms., works, E...gal. .32½- —
1 to 18 dms., works, E. gal. .35½- —
tanks, E. works.....gal. .24½- —

SD23G, works, E., c.l., dms., gal. .36½- —
19 dms.....gal. .38½- —
1 to 18 dms.....gal. .41½- —
tanks .....gal. .30½- —

Prices for territories other than E. of Rockies are 4c. per gal., in tanks, and 5c. per gal., in drums, higher.

SB23H, works, c.l., dms..gal. .34 - —
19 dms.....gal. .36 - —
1 to 18 dms.....gal. .39 - —
tanks .....gal. .28 - —
Special solvent, dms., c.l., works..gal. .34 - —
20 dms., to c.l.....gal. .36 - —
1 to 19 dms.....gal. .39 - —
tanks, E. works.....gal. .28 - —

Tankcar sales require written authorization by Alcohol Tax Unit.

Diacetone, acetone-free, dms., c.l., dlvd..lb. .11½- .13
l.c.l., dlvd.....lb. .12 - .13½
tanks, dlvd.....lb. .10½- .12
tech., dms., c.l., dlvd.....lb. .11 - .12
l.c.l., dlvd.....lb. .11½- .12½
tanks, dlvd.....lb. .10 - .11

Ethyl, 190 pf., ex. molasses, dms., c.l..gal. 7.92½- —
19 dms.....gal. 7.96 - —
5 to 8 dms.....gal. 7.99 - —
1 to 4 dms.....gal. 7.99 - —
tanks .....gal. 7.86¼- —
absolute, dms., c.l.....gal. 8.37½- —
19 dms.....gal. 8.41 - —
5 to 18 dms.....gal. 8.44 - —
1 to 4 dms.....gal. 8.44 - —
Ethyl alcohol in bbls. 2c. higher than dms.
Grain alcohol 25c. gal. higher.

Ethylhexyl, dms., c.l., works.lb. .24 - —
l.c.l., same basis.....lb. .25 - —
tanks, same basis.....lb. .23 - —
Furfuryl, tech., cns., works..lb. .35 - —
dms., c.l., 33,000 lbs., works, lb. .20 - —
l.c.l., 500 lbs. and more, works..lb. .25 - —
Isoamyl (see Carbinol Isobutyl).
Isobutyl, refd., dms., works..lb. .0860- —
tanks, same terms.....lb. .0760- —
Isopropyl,[2] refd., 91% dms., 5 gals., f.o.b. dest..gal. .66½- —
55 gals., c.l., same basis, gal. .35 - —
l.c.l., same basis...gal. .40 - —
tanks, frt. alld.....gal. .30 - —
99%, dms., 5 gals., same basis..gal. .65 - —
55 gals., c.l., same basis, gal. .38 - .44
l.c.l., same basis...gal. .43 - .47
tanks, same basis.....gal. .33 - .37½
Methyl (see Mechanol).
Phenylethyl, bots., cns.....lb. 2.10 - 2.50
Polyvinyl, type A, fiber-pack, 2,000 lbs. and over, f.o.b. cars, Niagara Falls..lb. .65 - —
less than 2,000 lbs.....lb. .70 - —
type B, fiber-pack, 2,000 lbs. and over, same basis..lb. .69 - —
less than 2,000 lbs.....lb. .65 - —
Propyl, normal, dms., works, gal. .67 - .70
Octyl (see ethylhexyl alcohol).
Tetrahydrofurfuryl, dms., contract, f.o.b. Waverly, N.Y.lb. .44 - —
450-lb. lots, same basis..lb. .50 - —
cns., f.o.b. Cedar Rapids, Ia., lb .55 - —

Aldehol, denat., grade., dms., tanks, works..gal. .70 - .72

Aldehyde, bisulphite, bbls., works, lb. .17 - —
smaller containers.....lb. .20 - —

aldol, 55 and 110 gal. dms., c.l., works..lb. .12 - —
l.c.l., works.....lb. .13 - —
5-10-gal. dms., works...lb. .15 - —
Aletris root, bgs.....lb. .55 - .56
Alizarin (see Red, alizarin).
Alkanet root, bgs.....lb. .67 - .69
Allspice, Mexican, bgs.....lb. .11½- .12
Alpha tocopherol, ampules, per gram. 1.00 - 1.10
Aloe, Cape, cs.....lb. .18 - .19
Curacao, cs.....lb. .68 - .70
gourds, bbls.....lb. .80 - .85
Socotrine, kgs.....lb. .58 - .60
Aloin, 140-lb. bbls.....lb. 5.45 - —
100-lb. kgs.....lb. 5.47 - —
25-lb. fib. dms.....lb. 5.54 - —
Alphanaphthol, bbls.....lb. .52 - —
Alphanaphthylamine, bbls.....lb. .32 - —
Althea root, USP, cube cut, bbls., lb. 1.20 Nom.

Alum, ammonia, burnt, USP., bbls., kgs..lb. .16 - .18
gran., bbls., works...100 lbs. 4.00 - —
divd., N. Y., Phil..100 lbs. 4.00 - —
lump, bbls., works....100 lbs. 4.25 - —
divd., N. Y., Phil..100 lbs. 4.25 - —
powd., bbls., works....100 lbs. 4.40 - —
divd., N. Y., Phil..100 lbs. 4.40 - —

Ammonia alum prices are for contract and open market; f.o.b. Phila.; frt. equalized with Marcus Hook, Boston, Atlanta, or Joliet; rail or water rates, whichever is lower. L.c.l. quantities must carry l.c.l. rate applying; for truck or ex warehouse deliveries all metrop. zones (except N. Y.) add l.c.l. rail or water rate, whichever is lower, from shipping or equalization point, divd., N.Y. price apply to truck or ex warehouse.

Potash, gran., bbls., works.... 100 lbs. 4.25 - —
divd., N. Y., Phila...100 lbs. 4.25 - —
lump, bbls., works....100 lbs. 4.50 - —
divd., N. Y., Phila...100 lbs. 4.50 - —
powd., bbls., works....100 lbs. 4.65 - —
divd., N. Y., Phila...100 lbs. 4.65 - —

Potash alum prices on same basis as those for ammonia alum.

Potash, chrome, bbls.....lb. .12½- .15
Soda, bbls., c.l., works..100 lbs. 3.25 - —
l.c.l., dlvd.....100 lbs. 4.25 - 5.00

Alumina acetate, tech., basic. powd., insoluble, bbls., 1 to 9, dlvd.....lb. .40 - —
smaller containers...lb. .50 - —
solut., 24%, l.c.l., 10 or over, dlvd..lb. .09½- —
1 to 9, dlvd.....lb. .10 - —
normal, solut., 20%, bbls., l.c.l., 10 or over, dlvd., lb. .08½- —
1 to 9, dlvd.....lb. .09 - —
Chloride, anhyd., com'l, dms., (extra), 45,000 lbs. and over, works..lb. .08 - —
12,000 to 40,000 lbs., works..lb. .09 - —
1,100 to 11,000 lbs., works, lb. .10 - —
140 to 375 lbs., works.lb. .11 - —
100 lbs. or less, works.lb. .12 - —
cryst., com'l, dms., c.l., works, lb. .06 - —
l.c.l., works.....lb. .06½- .06¾
solution, 32 deg., cbys., c.l., works..lb. .02¾- —
l.c.l., works.....lb. .03¼- —
Formate, 30%, solut., bbls., c.l., dlvd..lb. .13 - —
l.c.l., dlvd.....lb. .15 - —
Hydrate, heavy, bbls., c.l., works..lb. .0340- —
l.c.l., bbls., works.....lb. .04 - —
bgs., c.l., works.....lb. .0310- —
light, bgs., c.l., dlvd.....lb. .14 - —
l.c.l., bgs., dlvd.....lb. .14½- —
bbls., c.l., dlvd.....lb. .14½- —
l.c.l., bbls., dlvd.....lb. .15 - —
Oleate, dms., contract.....lb. .17½- —
open order.....lb. .17½- .20
Palmitate, precip., bbls.....lb. .20½- .21½
Resinate, precip., dms., dlvd.lb. .15 - —
Stearate, precip., bbls., ctns., c.l..lb. .23 - —
l.c.l.....lb. .24 - —
Sulphate, com'l, bgs., c.l., works, frt. equaled..100 lbs. 1.15 - 1.25
l.c.l., works, frt. equald.. 100 lbs. 1.40 - 1.50
bbls., c.l., works....100 lbs. 1.35 - 1.45
l.c.l., works, frt. equaled, 100 lbs. 1.60 - 1.70
iron free, bgs., c.l., works, 100 lbs. 1.85 - —
l.c.l., works.....100 lbs. 2.10 - —
bbls., c.l., works....100 lbs. 2.05 - —
l.c.l., works.....100 lbs. 2.80 - —

Aluminum, 98-99%,[2,3,4] c.l....lb. .15 - —
l.c.l.....lb. .16 - —
paste, lining, extra fine, dms., 50 gal. 200 lbs..lb. .56 - —
standard, dms., 200 lbs...lb. .38 - —
powder, lining, extra fine, dms., 200 lbs..lb. .93 - —
standard, dms, 200 lbs...lb. .59 - —
litho, lining, dms., 200 lbs..lb. .57 - —
unpolished, dms., 200 lbs..lb. .36 - —
varnish, standard, dms., 200 lbs..lb. .40 - —

Aluminum paste and powder prices are 5c. per lb. higher for less than 200 lbs.; for containers, smaller than drums, prices are 1c. per lb. higher for 100 lbs. 1½c. per lb. higher for 50 lbs.; 3c. per lb. higher for 10 lbs.; 5c. per lb. higher for 2 lbs.; 8c. per lb. higher for 1 lb.; and 12c. per lb. for ½ lb. Transportation allowed East of Mississippi.

Ambergris, gray, tins.....oz.17.00 -18.00
Aminomethylpropanol, dms., wks., lb. .50 - —
5 and 10-gal. cans, works..lb. .60 - —
Aminopyrine, 100-lb. dms.....lb. 4.00 - —
5-lb. bots.....lb. 4.25 - —
Ammonia aldehyde, dms., works, lb. .65 - .70
Anhydrous[5], fertilizer, f.o.b. Belle, W. Va., frt. equal with Hopewell, Va..ton.90.00 - —
refrigeration[6], tanks, works, lb. .05 - —
pure, cycls., dlvd., met. N.Y., lb. .16 - —

Anhydrous ammonia in cylinders is quoted on a nationwide schedule of delivered and stuck point prices in all States.

Aqua, 26°, cbys.....lb. .05½- —
dms., c.l.....lb. .02¾- —
l.c.l.....lb. .02½- —
tanks (on NH_3 content), f.o.b. works..lb. .04 - —
Benzoate, dms., kgs., 4,000 lbs. or more..lb. .43 - —
1,000 lbs. to 3,900 lbs....lb. .44 - —
900 lbs. or less.....lb. .47 - —
Bicarbonate, dms., dlvd. Met. N.Y..lb. .0564- .0614
Bichromate, bbls.....lb. .30 - .32
Bifluoride, bbls.....lb. .15½- .18
Borate, bbls., kgs.....lb. .15 - .16

Ammonia, Bromide, gran., bbls. lb. .31 - .35
bxs. .....lb. .34 - .38
kegs .....lb. .32 - .36
Carbonate, lump, dms., dlvd. Met. N. Y..lb. .08½- .09¼
cns., asms basis.....lb. .14¼- —
powdered, lc. per lb. higher.
Chloride, tech. (see Ammoniac, sal).
USP, gran., 225-lb. bbls....lb. .12 - .13
100-lb. kgs.....lb. .15 - —
Citrate, 250-lb. bbls.....lb. .75 - —
100-lb. dms.....lb. .80 - —
25-lb. dms.....lb. .82 - —
25-lb. dms.....lb. .84 - .85
Fluoride, bbls.....lb. .18 - .20
Hydroxide (see Ammonia, aqua),
Hypophosphite, dms.....lb. 1.25 - 1.27
jars .....lb. 1.35 - —
Iodide, 5-lb. bots.....lb. 3.71 - —
jars .....lb. 3.66 - —
Linoleate, 80%, anhyd., bbls., kgs..lb. .12 - —
Molybdate, kgs., works.....lb. 1.05 - 1.20
Nitrate, tech., bgs., works, 100 lbs. 4.35 - —
bbls., works.....100 lbs. 4.55 - —
Oleate, dms.....lb. .14 - —
Oxalate, neutral, powd., bbls., kgs..lb. .23 - .29
Perchlorate, kgs.....lb. .55 - .65
Persulphate, kgs, dom.....lb. .21 - .23
Phosphate, dibasic, NF V, bls. lb. .37 - —
kgs. .....lb. .39 - —
tech., bbls., c.l.....lb. .07¼- —
l.c.l. .....lb. .08¾- .09¼
monobasic, crystal (fert. grade), 11% N., 48% phos., bulk, f.o.b. E. works..unit-ton. No prices
pure, bbls.....lb. .40 - .45
tech., bbls., c.l.....lb. .07¼- —
l.c.l. .....lb. .08¾- .09¼
Salicylate, USP, kgs.....lb. 1.15 - 1.20
Silicofluoride, bbls.....lb. .15 - —
Stearate, anhydrous.....lb. .24½- —
paste .....lb. .06½- —
Sulphate[2], dom., bulk, c.l., contr., f.o.b. cars, ports, July-Dec. shipt..ton.29.00 - —
spot, same basis.....ton.30.00 - —

Ammonia sulphate prices are $1 per ton less than above prices f.o.b. cars nearest inland producing oven.

Sulphide, liquid, 40-45%, basis, 100%, dms., c.l., works, lb. .07½- —
l.c.l., dlvd.....lb. .15 - —
tanks, dlvd.....lb. .07½- —
red, 48%, cbys., works.....lb. .08 - —
dms., works.....lb. .06 - —
yellow, 33%, cbys., works..lb. .08 - —
dms., works.....lb. .06 - —
Sulphocyanide, C.P., dms....lb. .45 - .55
tech., kgs.....lb. .40 - —
Ammoniac, gum (see Gum, ammoniac).
sal, gray, dom., bbls., c.l. 100 lbs. 5.50 - 5.75
l.c.l. .....100 lbs. 6.00 - 6.70
white, gran., dom., bbls., c.l., works..100 lbs. 4.45 - —
l.c.l., same basis...100 lbs. 5.15 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., dlvd..lb. .12½- .13½
l.c.l., dlvd.....lb. .13 - .14
tanks, dlvd.....lb. .11½- .12½
cns., works.....lb. .18 - .19
ex Pentane, dms., c.l., frt. alld. E. of Miss. R..lb. .13½- —
l.c.l., same basis.....lb. .14½- —
tanks, same basis.....lb. .12½- —
Alcohol (see Alcohol amyl).
Butyrate, dms., 50 gal., returnable..lb. .75 - —
Caporate, cns.....lb. 2.75 - —
Chlorides, normal, dms., works, lb. .56 - —
small lots, works.....lb. .68 - —
mixed, tech., dms., c.l., works..lb. .06 - —
l.c.l., works.....lb. .07 - —
tanks, works.....lb. .05 - —
Naphthalenes, mixed, crude, l.c.l., dms., works..lb. .14 - —
refd., l.c.l., dms., works..lb. .16 - —
Nitrite, bots.....lb. 1.80 - 1.85
Mercaptan, dms., l.c.l., works, lb. 1.10 - —
Oleate, dms., l.c.l., works...lb. .25 - —
Salicylate, 5-lb. bots.....lb. .63 - .65
cns..lb. .55 - .60
Stearate, dms., l.c.l., works..lb. .26 - —
Amylene, dms., c.l., works....lb. .102 - —
l.c.l., works.....lb. .11 - —
tanks, works.....lb. .09 - —
Anethol, bots.....lb. 1.25 - 1.60
cans .....lb. 1.15 - 1.50
Angelica root, dom., bls.....lb. .65 - 1.75
import., natural, bls.....lb. 1.60 - 1.65
Angostura bark, bls.....lb. .30 - .35
Anilin oil, dms.....lb. .15 - —
l.c.l. .....lb. .16 - —
tanks .....lb. .14½- —
Salt, dms., works.....lb. .22 - .24
Anise, Cyprus, bgs.....lb. .38 - .39
Spanish, bgs.....lb. .36 - .37
Star .....lb. .17½- .18
Turkish, bgs.....lb. .32½- .33
Anisic aldehyde, bots.....lb. 2.75 - 2.80
Annatto paste, bxs.....lb. .34 - .39
seed, bgs.....lb. .06 - .06½
Anthracene, 80-85%, bbls., wks., lb. .55 - —
90%, bbls., works.....lb. .65 - —
Anthraquinone, 99.5%, subl., bbls., lb. .70 - —

Antimony butter (see Antimony chloride).
Chloride, solut., cbys.....lb. .17 - —
Metal,[2,4,6] spot.....lb. .14 - —
Needle, brown, Bolivian, 67%, lb. .16½- .18½
Chinese, black, 70%.....lb. .19 - .22
crude, bbls.....lb. .17 - —
Oxide, bgs., c.l.....lb. .15 - —
l.c.l. .....lb. .16½- —
Salt, 65%, dms., dlvd. E. of Miss. River..lb. .33 - —
bbls., same basis.....lb. .31 - —
White pigments, bgs.....lb. .11½- .14½

Antipyrene, bbls., kgs., ton lots, lb. 2.00 - —
smaller lots.....lb. 2.10 - 2.20
Apomorphine, bots.....oz.23.20 -23.70
Archil extract, bbls.....lb. .26 - —
Areca nuts, powd., bbls.....lb. .15 - .16
Arecoline hydrobromide, bots..oz 6.00 - 7.25
Argols, test 70% to 85%, basis 100%, 100 kgm., purity, f.o.b. Spanish ports..100 kilos.110.00 -115.00
Arnica flowers, bls.....lb. 5.00 Nom.
Root, bls.....lb. 1.50 Nom.
Arrowroot, St. Vincent, powd., bgs..lb. .10¼- .10¾
bbls. .....lb. .10 - .10½
Arsenic, metal, lump, cs.....lb. No prices
Chloride (arsenous), cns....lb. 4.85 - —
Iodide (arsenous), 5-lb. bots..lb. 5.58 - —
jars .....lb. 5.43 - —
Red, import, cs.....lb. No prices
Trioxide (see Acid, arsenous).
White, powd., kgs., c.l.....lb. .04 - —
l.c.l. .....lb. .04¾- —

Asafetida, cs.....lb. .45 - .50
powd., bbls., bxs.....lb. .68 - .75
Asbestine (see Talc, N.Y. fibrous).
Asbestos fiber, 5M., bgs., c.l. (20 tons), Canad. mines..ton.42.50 - —
5R, bgs., c.l. (20 tons), Canad. mines..ton.40.00 - —
6D, bgs., c.l. (30 tons), Canad. mines..ton.30.00 - —
7D, bgs., c.l. (30 tons), Canad. mines..ton.26.00 - —
7F, bgs., c.l. (30 tons), Canad. mines..ton.24.00 - —
7H, bgs., c.l. (30 tons), Canad. mines..ton.20.00 - —
7K, bgs., c.l. (30 tons), Canad. mines..ton.17.50 - —
7M, bgs., c.l. (30 tons), Canad. mines..ton.15.00 - —

Asphaltum, Manjak No. 10, crude, 20 tons, f.o.b. plant..lb. .04½- —
smaller lots, f.o.b. plant, lb. .05¼- —
process form, bgs., 20 tons, f.o.b. plant..lb. .05 - —
smaller lots, f.o.b. plant, lb. .06 - —
California, dms., c.l., f.o.b. N.Y. ton.20.00 - —
l.c.l., f.o.b. N. Y.....ton.36.50 - —
Cuban A, bgs., c.l., f.o.b. N.Y., ton.60.00 - —
l.c.l., f.o.b. N. Y.....ton.90.00 - —
B, bgs., c.l., f.o.b. N. Y..ton.35.00 - —
l.c.l., f.o.b. N. Y.....ton.55.00 - —
Egyptian, bgs., c.l., f.o.b. N. Y., lb. .12 - —
l.c.l., f.o.b. N. Y.....lb. .15 - —
Gilsonite, brilliant black, selecta, bgs., c.l., Western shipt. point..ton.32.90 - —
seconda, bgs., c.l., Western shipt. points..ton.25.50 - —
selects, bgs., c.l., Western shipt. points..ton.30.50 - —
l.c.l., f.o.b. N. J. or N. Y., whse..ton.58.00 - —
jet, bgs., c.l., Western shipping points..ton.30.50 - —
Mexican, Texas, dms., c.l., refinery..ton.19.00 - —
l.c.l., refinery.....ton.21.00 - —
tanks, refinery.....ton.16.00 - —
Petroleum, cut-back, bbls., l.c.l., E. cst., refinery..gal. .13 - —
dms., c.l., E. cst., refinery, gal. .12 - —
tanks, Calif., refinery...ton.12.50 -14.00
East Coast, refinery...gal. .06 - .06½
Ill., Ind., refinery.....gal. .05½- —
N. Orleans, refinery...gal. .06 - —

Atropine, bots.....oz.16.50 - —
Sulphate, bots.....oz.12.75 - —

B

Balm of Gilead buds, bgs.....lb. .55 - .60
Barbasco root (see cube root).
Barberry bark, bgs.....lb. .55 - .60
Tree bark, bls.....lb. No prices
Barbital, cs.....lb. 3.50 - 3.60
sodium, cs.....lb. 3.75 - —
Barium carbonate, natural, 99% thru 200 mesh, bgs., c.l., works..ton.43.00 - —
precip., bgs., c.l., works..ton.55.00 - —
l.c.l., works.....ton.60.00 - —
bbls., c.l., works.....ton.60.00 - —
l.c.l., works.....ton.65.00 - —
Sulphur-free, c.l., works..ton.60.00 - —
l.c.l., works.....ton.65.00 - —
Chlorate, kgs.....lb. .60 - —
Chloride, CP, cryst., bbls....lb. .25 - .27
pure, bbls., kgs.....lb. .10 - .12
tech., dom., cryst., bgs., c.l., Zone 1, divd., New England States, N. Y., N. J., Pa., Md., Va., Ohio, Mich., Ind., Wisc., Ill., Ky., and principal cities on west bank of Miss., north of Ark. line .....ton.77.00 - —
bbls., same basis...ton.79.00 - —
l.c.l., bgs., same basis, ton.90.00 - —
bbls., same basis..ton.92.00 - —
Zone 2, bgs., c.l., divd., Tenn., N.-S. Carolina, Ga., Ala., Miss., Fla., ton.81.00 - —
bbls., same basis..ton.83.00 - —
l.c.l., bgs., same basis, ton.94.00 - —
bbls., same basis...ton.96.00 - —
Zone 3, bgs., c.l., Minn., Ia., Mo., Col., N. Mex., Idaho, Utah, Ariz., ton.87.00 - —
bbls., same basis..ton.89.00 - —
l.c.l., bgs., same basis, ton.100.00 - —
bbls., same basis..ton.102.00 - —
Zone 4, bgs., c.l., divd., Wash., Ore., Calif., Nev..ton.83.00 - —
bbls., same basis..ton.85.00 - —
l.c.l., bgs., same basis, ton.96.00 - —
bbls., same basis..ton.98.00 - —
Dioxide, dms., c.l., works...lb. .10 - —
l.c.l., same basis.....lb. .12 - .13
Fluoride, bbls.....lb. .18 Nom.
Hydrate (see Hydroxide).
Hydroxide, bbls., works.....lb. .06 - .07
Iodide, bots.....lb. 4.77 - —
jars .....lb. 4.62 - —
Monoxide (see Oxide).
Nitrate, cks.....lb. .10½- —
Oxide, ungrd., dms., c.l., works, lb. .08 - —
l.c.l., same basis.....lb. .10 - .12
grd., dms., l.c.l., works....lb. .11 - .15
Peroxide (see Dioxide).
Silicofluoride, bbls.....lb. .15 - .17
Sulphate, tech. (see Barytes and blanc fixe).
X-ray, bbls.....lb. .09½- .10
kgs. .....lb. .12 - —
Barytes, dom., floated, bbls., c.l., St. Louis..ton.25.15 - —
l.c.l., same basis.....ton.26.15 - —
paper bags, c.l., St. Louis, ton.22.65 - —
l.c.l., same basis.....ton.23.85 - —
ex whse., New York...ton.31.50 - —
Southern, off color, bgs., mines, ton.17.50 - —
95.75%, bgs., mines.....ton.18.00 - —
ore, bulk, mines.....ton. 8.00 - —
German, grd., bbls., c.l., dock, t.a..ton. No prices
l.c.l., ex whse.....ton. No prices
ungrd., bulk, c.l., ex dock.ton. No prices
Italian, grd., bbls., c.l., ex dock, t.a..ton. No prices
l.c.l., ex whse.....ton. No prices
Bauxite, bulk, mines.....ton. 7.00 -10.00
Bay leaves (see Laurel leaves).
Bay Rum, tax extra, import, bbls..gal. .77½- .78½
Bayberry bark, bgs.....lb. .14 - .15
Belladonna leaves, bls.....lb. 2.40 - 2.45
Root, bls.....lb. 2.40 Nom.

Bentonite, 200 mesh, bgs., Wyo., works	ton.	11.00	- —
325 mesh, bgs., Wyo., works,	ton.	16.00	- —
Benzaldehyde, tech., cbys., dms.,	lb.	.45	- .55
N.F. VI, dms., 50 to 100 lbs.	lb.	.85	- —
5 to 25 lbs.	lb.	.90	- .95
Benzene (see Benzol).			
Benzidin base, bbls.	lb.	.70	- —
Benzocaine, cns.	lb.	3.00	- —
Benzol, 90%, dms., returnable, works.	gal.	.19	- —
tankcars, frt. alld. E. of Omaha.	gal.	.14	- —
W. Coast, f.o.b. Minnequa, Colo—	gal.	.14	- —
Benzophenone, dms.	lb.	1.20	- 1.25
Benzoyl chloride, cbys.	lb.	.23	- .28
Peroxide, pure, gran., fib. ctns., works.	lb.	1.95	- —
Benzyl acetate, f.f.c., cns.	lb.	.59	Nom.
dms.	lb.	.55	Nom.
Alcohol (see Alcohol, benzyl).			
Benzoate, a.m.a., f.f.c., cns.	lb.	.95	Nom.
dms.	lb.	.90	Nom.
Chloride, cbys., frt. equald.	lb.	.22	- .24
Cinnamate, cns.	lb.	5.50	Nom.
Formate, cns.	lb.	3.50	- 3.75
Isoeugenol, bots.	lb.	9.50	- —
Propionate, bots.	lb.	2.25	Nom.
Salicylate, bots.	lb.	1.80	Nom.
Benzylidineacetone, bots.	lb.	2.00	- 2.10
Berberine bisulphate, cns.	lb.	17.75	-27.50
Hydrochloride, cns.	lb.	17.75	-27.50
Sulphate, cns.	lb.	17.75	-27.50
Berberis root, bls.	lb.	.10	- .11
Betanaphthol, sublim., kgs.	lb.	.55	- —
tech., bbls., c.l., works.	lb.	.23	- —
l.c.l., bbls., works.	lb.	.24	- —
Benzoate, fib. dms.	lb.	2.50	- —
kgs.	lb.	2.70	- —
Betanaphthylamine, tech., kgs.	lb.	.51	- —
Beta root, bls.	lb.	.19	- .21
Bismuth chloride, 5-lb. bots.	lb.	3.00	- —
jars	lb.	2.85	- —
Citrate, USP, VIII, 5-lb. bots.	lb.	2.86	- —
jars	lb.	2.75	- —
Hydroxide, 5-lb. bots.	lb.	3.46	- —
cns.	lb.	3.35	- —
Metal, ton lots.	lb.	1.25	- —
Nitrate, cryst., 5-lb. bots.	lb.	1.45	- —
cns.	lb.	1.30	- —
Oxychloride, 5-lb. bots.	lb.	3.19	- —
cns., kgs.	lb.	3.10	- —
Subbenzoate, 5-lb. bots.	lb.	3.51	- —
fib. dms.	lb.	3.40	- —
Subcarbonate, bots., cns.	lb.	1.59	- 1.85
175-lb. bbls.	lb.	1.50	- —
X-ray, 5-lb. bots.	lb.	2.79	- —
fib. dms.	lb.	2.73	- —
Subgallate, bots., cns.	lb.	1.49	- 1.72
fib. dms.	lb.	1.40	- —
Subiodide, bots.	lb.	4.24	- —
fib. dms.	lb.	4.13	- —
Subnitrate, powd., bots., cns.	lb.	1.29	- 1.57
250-lb. bbls.	lb.	1.20	- —
Subsalicylate, 60-66%, bots.	lb.	2.59	- —
bbls., fib. dms.	lb.	2.50	- —
Sulphocarbolate, 5-lb. bots.	lb.	3.76	- —
fib. dms.	lb.	3.65	- —
Trioxide, powd., 5-lb. bots.	lb.	3.76	- —
cns.	lb.	3.65	- —
Bismuth ammonia, citrate, USP, powd., 25-lb. dms.	lb.	3.40	- —
5-lb. cns.	lb.	3.45	- 3.50
Black, acetylene, c.l., works, duty paid.	lb.	.14	- —
Bone, 1A, c.l.	lb.	.17	- —
l.c.l.	lb.	.17½	- —
3, c.l.	lb.	.12	- —
l.c.l.	lb.	12½	- —
4, c.l.	lb.	.11	- —
l.c.l.	lb.	.11½	- —
5, c.l.	lb.	.08½	- —
l.c.l.	lb.	.09	- —
6, c.l.	lb.	.08½	- —
l.c.l.	lb.	.09	- —
7, c.l.	lb.	.11½	- —
l.c.l.	lb.	.12	- —
8, c.l.	lb.	.12½	- —
l.c.l.	lb.	.13	- —

Bone black prices are for barrels or bags, freight allowed East. Pacific Coast prices are 1½c. per lb. higher, ex dock or ex whse.

Carbon, regular, uncompressed, bgs., c.l., f.o.b. plants.	lb.	.03425	- —
l.c.l., bgs. or cartons, f.o.b. whse.	lb.	.07½	- —
dlvd.	lb.	.07½	- —
beads, compressed, bgs., c.l., f.o.b. plants.	lb.	.03350	- —
l.c.l., bgs. or cartons, f.o.b. whse.	lb.	.07	- —
dlvd.	lb.	.07	- —
bulk, cars, c.l., f.o.b. plants,	lb.	.03150	- —
Charcoal (see C).			
Graphite (see G).			
Iron oxide, magnetic, pure, bbls., l.c.l., works.	lb.	.08½	- —
Lamp, dom., 1, ctns., c.l., works.	lb.	.07	- —
l.c.l., works	lb.	.08	- —
2, ctns., c.l., works	lb.	.09	- —
l.c.l., works	lb.	.10	- —
2A, ctns., c.l., works	lb.	.11	- —
l.c.l., works	lb.	.12	- —
3, ctns., c.l., works	lb.	.13	- —
l.c.l., works	lb.	.14	- —
4, ctns., c.l., works	lb.	.15	- —
l.c.l., works	lb.	.16	- —
5, ctns., c.l., works	lb.	.17	- —
l.c.l., works	lb.	.18	- —
6, ctns., c.l., works	lb.	.24	- —
l.c.l., works	lb.	.25	- —
7, ctns., c.l., works	lb.	.34	- —
l.c.l., works	lb.	.35	- —
Mineral, vine type, bbls., l.c.l., f.o.b. works.	lb.	.0434	- —
Vine, A, bbls., works or N. Y.,	lb.	.04½	- .05
B, bbls., works or N. Y.	lb.	.05¾	- —
kegs, f.o.b. N. Y.	lb.	.06	- —
dms., c.l., frt. alld.	lb.	.09½	Nom.

Black dyes are listed under Dyes.

Black Haw root bark, bls.	lb.	.40	- .45
Tree bark, bls.	lb.	.16	- .17
Black Indian hemp root, bls.	lb.	.22	- .23
Blanc fixe, dry, by-product, bgs., c.l., works.	ton.	60.00	- —
l.c.l., works	ton.	67.50	- —
direct process, bgs., c.l., works, frt. equaled.	ton.	70.00	- —
l.c.l., same basis	ton.	80.00	-95.00
pulp, 66⅔%, bbls., c.l., works,	ton.	40.00	- —
l.c.l., works	ton.	46.50	- —
Bleaching powder, dms., c.l., works.	100 lbs.	2.00	- 2.85
l.c.l., works	100 lbs.	2.25	- 2.35
Blood, dried, dom., 16-16½ ammon., bgs., f.o.b. N. Y.,	unit-ton.	4.15	- —
high-grade, grd., 16-17 ammon, bulk, f.o.b. Chicago,	unit-ton.	4.35	- —
import, bgs., c.i.f. ports, shipt.	unit-ton.	4.15	- —
soluble (see Albumen, blood).			
Bloodroot, lbs.	lb.	.28	- .30
Blue, alkali, toner, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis.	lb.	.85	- .90

Alkali blue toner prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.). Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Bronze, bbls., same basis, contracts.	lb.	.36	- —
Celestial, bbls.	lb.	.10	- .12
Chinese, bbls., same basis, contracts.	lb.	.36	- —
Cobalt, genuine, 1-kilo pkg.	lb.	4.90	- —
Imitation (see Blue, ultramarine).			
Copper, phthalocyanin, bbls., f.o.b. works, frt. alld.	lb.	3.30	- 3.75
Milori, bbls., same basis, contracts.	lb.	.36	- —
Molybdated, Victoria, same basis, contracts.	lb.	3.15	- —
Peacock, concentrated, same basis, contracts.	lb.	.75	- —
regular, same basis, contracts,	lb.	.54	- —
Potash, dom., bbls., same basis, contracts.	lb.	.42	- —
Prussian, bbls., same basis, contracts.	lb.	.36	- —
Blue, tungstated, peacock, kgs.	lb.	3.75	- —
Victoria, kgs.	lb.	3.30	- —
methyl violet, kgs.	lb.	2.10	- —
Ultramarine, dry or pulp, cobalt grades, bbls., works, frt. equald.	lb.	.22	- .24
jobbing grades, bbls., same basis.	lb.	.11	- —
regular grades, bbls., same basis.	lb.	.16	- .27

Blue, ultramarine, dlvd., ex whse., is 1c. higher; Pac. Coast, ex whse., 2c. higher; 100-lb. kgs., 1c. above bbls.; 28-lb. boxes, 5c. above bbls.

Victoria, ink toner, bbls., same basis alkali toner.	lb.	1.83	- —
synthetic vehicle, bbls., same basis.	lb.	1.93	- —

Blue dyes are listed under Dyes.

Blue flag root, bls.	lb.	.15	- .20
Blue mass, USP, cns., tubs.	lb.	1.67	- 1.84
powd., bots., cns., dms.	lb.	1.70	- 1.84

Bluestone (see Copper sulphate).
Blue vitriol (see Copper sulphate).

Bone, raw, dom., 4½% ammon., 50% phos., bgs., f.o.b. Chicago.	ton.	30.00	-40.00
import, bgs., c.i.f. ports.	ton.	37.50	- —
meal, steamed, dom., 3% ammon., 50% phos., bgs., f.o.b. Chicago.	ton.	39.00	-40.00
import, bgs., c.i.f. ports.	ton.	37.50	- —
phosphate, precip. (see Calcium phosphate dibasic, precip.).			
steamed, dom., 1¼% ammon., 60% phos., bgs., f.o.b. Chicago.	ton.	44.00	- —
import, 1% ammon., 65-70% phos., bgs., c.i.f. ports.	ton.	42.00	- —

Bentonite—Brimstone

Boneset leaves, bls.	lb.	.08½	- .09
Borage flowers, bls.	lb.	.45	- .48
Borax, tech., 99½% gran., bulk, c.l., frt. alld.	ton.	40.50	- —
bgs., c.l., frt. alld.	ton.	43.00	- —
ton lots, ex whse.	ton.	54.00	- —
less than ton lots, ex whse.	ton.	59.00	- —
bbls., c.l., frt. alld.	ton.	53.00	- —
ton lots, ex whse.	ton.	64.00	- —
less than ton lots, ex whse.	ton.	69.00	- —
powd., bgs., c.l., frt. alld.	ton.	48.00	- —
ton lots, ex whse.	ton.	59.00	- —
less than ton lots, ex whse.	ton.	64.00	- —
bbls., c.l., frt. alld.	ton.	58.00	- —
ton lots, ex whse.	ton.	69.00	- —
less than ton lots, ex whse.	ton.	74.00	- —

USP, $15 per ton higher.

Bordeaux mixture, dms., c.l., dealers.	lb.	.11	- —
l.c.l., dealers, dms.	lb.	.11½	- —

Bordeaux mixture prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. and over, no trucking or freight allowances for works or warehouse pickups.

Brazilwood extract (see Hypernic).
Brimstone (see Sulphur).

The zoo that let the bars down on packaging

SUPPOSE you are strolling in the famous Bronx Zoo. Suddenly you stop, stare, rub your eyes.

Right in front of you are a dozen or more loose lions. There's nothing between you and them to keep you from becoming their next meat course. What would you do?

Well, if you were really jittery, you might head for the nearest tree. But if you took a close look, you wouldn't. You'd see a wide, dry moat, 16 feet deep, that keeps the lions in their place, perfectly harmless. A new departure? Certainly.

For there are no bars in the lions' cages at the Bronx Zoo today. In fact, there are no cages. The lions retire to houses that look like the stockades of Africa.

There's a new packaging idea for you! The old gave way to the new—and proved to be mighty successful.

Often a new packaging idea will lead to bigger and better sales for manufacturers. That's why Continental's packaging experts devote so much of their time to creating new and better packages, new designs, new uses of color.

Continental is a pioneer in creating packages that sell. And we develop containers for consumer convenience, product protection, high-speed filling, and other factors that affect the balance sheet.

Our packaging experts know every angle of packaging—from construction to marketing. Whenever you have a packaging problem, why not call for Continental? We are always at your service.

CONTINENTAL CAN COMPANY

New York Chicago San Francisco Montreal Toronto Havana

Bromine—Cranesbill Root

Bromine, purif., cs., 1,000 lbs., frt. alld. E. of Rockies..lb. .23 - .30
single pkg., same basis..lb. .30 - .35
Bromoform, USP, 100-lb. lots, bots..lb. 1.50 - —
cbys. ..lb. 1.42 - —
Bromstyrol ..lb. 3.50 - 3.75
Bronze powder, aluminum (see A).
Gold, litho, cns., dms., over 10 lbs..lb. .60 - .65
moulding, cns., dms., over 10 lbs..lb. .80 - 1.00
printing ink, cns., dms., over 10 lbs..lb. .85 - 1.20
radiator, cns., dms., over 10 lbs..lb. .45 - .50
Broomtops, bls..lb. .15 - .16
Brown, iron oxide, pure precip., cks., f.o.b. N.Y..lb. .12 - —
Metallic, iron oxide, bbls., wks. lb. .02¾- —
paper bgs., c.l., works.....lb. .0260- —
Sap, crystals, dom., works...lb. .12 - —
powdered ..lb. .13 - —
Sienna, burnt, American, bbls., f.o.b. works..lb. .03½- .06
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08¾- .10¾
raw, American, bbls., f.o.b. works..lb. .03¼- .05¾
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08 - .10
Umber, American, bbls., works. lb. .08¾- —
Turkey, bbls., l.c.l., f.o.b. Bethlehem, Easton, Pa., N.Y..lb. .05 - —
St. Louis..lb. .05½- —
ex car, Los Angeles...lb. .05¾- —
Portland, San Francisco, Seattle..lb. .05¾- —
ex whse. Los Angeles..lb. .06½- —
Portland, San Francisco, Seattle..lb. .06 - —
Boston ..lb. .05 - —
Chicago, Indianapolis, New Orleans..lb. .05½- —
Kansas City..lb. .06 - —
Minneapolis ..lb. .0560- —
Pittsburgh ..lb. .05¼- —
Vandyke, regular, bbls., l.c.l., works..lb. .09 - —
special ..lb. .12 - —
Brucine, 100 oz., cns.....oz. .35 - —
Sulphate, 100 oz., cns.....oz. .30 - —
Bryonia root, bls..lb. .28 - .30
Buchu leaves, bls..lb. .72 - .73
Buckthorn bark, true, bls....lb. .75 - .80
cut and sifted, bbls.....lb. .75 - .80
Berries, bgs..lb. .35 - .40
Burdock root, bls..lb. .40 - .45
Burgundy pitch, dom., dms...lb. .05½- .06
Butternut bark, bls..lb. .07 - .08
Butyl acetate[2], norm., dms., c.l., frt. alld..lb. .11 - .12
l.c.l., frt. alld.....lb. .11½- .12½
tanks frt. alld.....lb. .10 - .11
tankwagons, frt. alld...lb. .10½- .11½
secondary, dms., c.l., frt. pd. E. of Miss. R..lb. .09 - —
dms., l.c.l., same terms.lb. .09½- —
tanks, same terms.....lb. .08 - —
Alcohol (see Alcohol).
Aldehyde, dms., c.l., works..lb. .15½- —
l.c.l., works.....lb. .16½- .17½
tanks, works.....lb. .14½- —
Carbinol, secondary, l.c.l., dms., works..lb. .60 - —
Chloride, normal, dms., c.l., works..lb. .20 - —
l.c.l. ..lb. .23 - —
Ether (see under Ether).
Lactate, dms.....lb. .23½- —
Propionate, dms., dlvd.....lb. .16½- .17
tanks .15½- —
Stearate, dms.....lb. .32½- —
Butyric ether, bots.....gal. 6.50 - 6.95
cns., works.....lb. .65 - .70
dms., frt. alld. Met. N.Y...lb. .60 - —
Butane, com'l, 16-34#, tanks, group 3..gal. .02½- .03

C

Cadmium, bromide, 25-lb. jars, 50 lbs. or more..lb. 1.65 - 1.68
single jars..lb. 1.70 - —
5-lb. bots..lb. 1.84 - 1.91
Cyanide, 25-lb. bots., dlvd.....lb. 3.00 - —
25-lb. cks., dlvd.....lb. 3.50 - —
Iodide, 5-lb. bots.....lb. 4.23 - —
25-lb. cans.....lb. 4.09 - —
Lithopone (see Yellow).
Metal, [2,4,6] pat., shapes, cs., dlvd..lb. .95 - —
ingots or sticks.....lb. .90 - —
Red (see Red).
Selenide (see Red).
Sulphite (see Yellow).
Caffeine, 10,000 lbs. or more, 100 lb. dms..lb. 2.60 - —
25 lb. dms.....lb. 2.63 - —
10 lb. cns.....lb. 2.65 - —
2,000 lbs. or more, 100-lb. dms. lb. 2.65 - —
25 lb. dms.....lb. 2.68 - —
10 lb. cns.....lb. 2.70 - —
1,000 lbs. or more, 100-lb. dms., lb. 2.70 - —
25 lb. dms.....lb. 2.73 - —
10 lb. cns.....lb. 2.75 - —
100 lbs. or more, 100-lb. dms.lb. 2.80 - —
25 lb. dms.....lb. 2.83 - —
10 lb. cns.....lb. 2.85 - —
less than 100 lbs., 10-lb. cns., lb. 3.15 - —
Citrated, bots.....lb. 2.30 Nom.
Hydrobromide, bots.....lb. 5.29 - 5.37
Calabar beans, bgs.....lb. .25 - .30
Calamus root, peeled, N. F., cs., lb. .85 Nom.
bleached, bls.....lb. No stocks
dom., natural, bls.....lb. .40 - .45
Calcium acetate, bgs., dlvd., 100 lbs. 3.00 - 4.00
Arsenate, bgs., c.l.....lb. .06½- .07½
l.c.l. ..lb. .06¾- .07¾
Calcium arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 90 lbs. or over; no frt. or truck allowances for plant or whse. pick-up.
Bromide, 100 lbs., works, frt. equald..lb. .65 - —
50 lbs., works.....lb. .67 - —
25 lbs., works.....lb. .70 - —
Carbide, dms., c.l., dlvd. 100 lbs. 4.75 - —
l.c.l., f.o.b. warehouse, 100 lbs. 4.85 - —
Carbonate (see Chalk and Whiting).
Chloride, flake, paper bgs., 77-80%, c.l., dlvd., ton.20.50 -35.00
l.c.l., 1 ton or more, dlvd., 100 lbs. 1.63 - 2.35
liquor, basis 40%, tanks, wks., ton. 7.50 - —
Calcium, chloride, solid, dom., 73-75%, dms., c.l., dlvd.ton.19.00 -33.00
l.c.l., 1 ton or over, dlvd., 100 lbs. 1.33 - 2.25
Calcium chloride c.l. prices for flake in burlap paper-lined bags, $2.50 per ton over paper bags, and drums $3.50 per ton over paper bags.
Gluconate, USP, gran., 150-lb. bbls..lb. .52 - —
dms.....lb. .57 - .59
cns.....lb. .70 - —
Powd., 2c. per lb. lower.
Glycerophosphate, fib. dms., 1,000-lb. lots..lb. 1.25 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.65 - —
Hypophosphite, cns.....lb. .62 - .65
Iodide, bots., jars.....lb. 4.04 - 4.19
Lactate, USP, bbls., 200 lbs..lb. .27 - .28
Mandelate, dense, dms.....lb. 2.05 - 2.15
fluffy, dms.....lb. 2.05 - 2.15
Nitrate, fertilizer grade, bgs., to fert. mfrs., ex vessel Atlantic or Gulf ports..ton. No prices
tech., bbls., ton lots, works, lb. .12½- .13
Palmitate, bbls.....lb. .22 - .24
Phosphate, dibasic, precip., 38-40% P_2O_5, bgs., c.l.f. Atlantic ports, shipt..unl.ton. No prices
feeding grade, f.o.b. bgs., c.l. works..ton.75.00 - —
food grade, f.o.b. works, 10 bbls. and over..lb. .07 - —
5 to 9 bbls., same basis. lb. .09 - —
1 to 4 bbls., same basis.. lb. .10 - —
medicinal, bbls.....lb. .11½- .12
dms.....lb. .12½- .18
monobasic, cryst., bgs., c.l., works, frt. equald..lb. .05¾- —
5 tons and over, bgs., same basis..lb. .06 - —
less than 5 tons, same basis. lb. .06¼- —
tribasic, c.l., bbls., works. lb. .0635- —
l.c.l., bbls.....lb. .0705- —
Resinate, precip., bbls., 1 ton.lb. .13 - —
smaller lots.....lb. .14 - —
Stearate, precip., bbls., ctns., ton..lb. .26 - —
smaller quantities.....lb. .27 - —
Sulphate (see Gypsum).
Sulphide, 70%, CaS, bgs., c.l., works..ton.46.00 - —
80% CaS, bgs., c.l., works.ton.51.00 - —
luminous, dom., tins, works. 100 lbs. 1.25 - —
Sulphocarbolate, 200-lb. bbls..lb. .48 - —
Calendula flowers, bls.....lb. .85 - .90
Calomel, bbls., fib. dms., kgs., 50 lbs. or more..lb. 2.05 - —
Camphor, natural, powd., cs...lb. 1.10 - 1.15
slabs, cs.....lb. 1.10 - 1.15
tablets, tin.....lb. 1.20 - 1.25
synth., dom., tech., bbls., in tract, 2,000 lbs. or more, works..lb. .36 - —
smaller lots, works..lb. .41 - —
USP, or import, gran., powd., bbls., 2,000-lb. lots..lb. .63 - —
1,000-lb. lots.....lb. .64 - —
smaller lots.....lb. .65 - —
tablets, 2,000-lb. lots...lb. .76 - —
1,000-lb. lots.....lb. .77 - —
smaller lots.....lb. .78 - —
Monobromate, bulk, 100-lb. lots. lb. 2.40 - —
25 to 50-lb. lots.....lb. 2.50 - —
Canada balsam (see Fir, balsam).
Canary seed, Argentine, bgs...lb. .0070- .0085
Morocco, bgs.....lb. .0580-.0600
Canella alba bark, bls.....lb. .45 - .50
Cantharides, Chinese, cs.....lb. 1.50 - 1.60
powd., bxs.....lb. 1.75 - 1.85
Russian, cs.....lb. 4.50 Nom.
powd., bxs.....lb. 5.50 Nom.
Capsicum (see Pepper, red).
Caraway, Dutch, bgs.....lb. 1.05 - 1.10
Carbazole, 95%, dms., ton lots, works..lb. .70 - —
smaller quantities, works..lb. .80 - —
98%, dms., ton lots, works...lb. .75 - —
smaller quantities, works..lb. .85 - —
Carbinol, butyl, norm. (see Amyl alcohol, normal).
Diethyl, l.c.l., works.....lb. .60 - —
Dimethylethyl, l.c.l., works..lb. .60 - —
Isobutyl, c.l., dms., frt. alld..lb. .23½- —
l.c.l., same basis.....lb. .23½- —
tanks, same basis.....lb. .21½- —
Carbon bisulphide, 55 gal., dms., c.l., frt. alld. E. of Miss. R., N. of Ohio R..lb. .05½- —
l.c.l., same basis.....lb. .06¼- —
5-gal. dms., c.l., same basis, lb. .07½- .08
l.c.l., same basis.....lb. .08½- .09
Dioxide, cyls.....lb. .06 - .08
Tetrachloride, Zone 1, 52½-gal. dms., c.l., frt. alld..gal. .73 - —
l.c.l., frt. alld.....gal. .80 - —
5 or 10-gal. dms., c.l., frt. alld..gal. .97 - —
l.c.l., frt. alld.....gal. 1.07 - —
Zone 2, 52½-gal. dms., c.l., frt. alld..gal. .80 - —
l.c.l., frt. alld.....gal. .87 - —
5 or 10-gal. dms., c.l., frt. alld..gal. 1.04 - —
l.c.l., frt. alld.....gal. 1.14 - —
Zone 3, 52½-gal. dms., c.l., frt. alld..gal. .94 - —
l.c.l., frt. alld.....gal.1.00 - —
5 or 10-gal. dms., c.l., frt. alld..gal. 1.17 - —
l.c.l., frt. alld.....gal. 1.27 - —
Zone 4, 52½-gal. dms., c.l.gal. .83 - —
l.c.l. ..gal. .90 - —
5 or 10-gal. dms., c.l....gal. 1.07 - —
l.c.l. ..gal. 1.17 - —

All prices on carbon tetrachloride are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. cars, L. A. Cal.; S. F. Cal.; Portland, Ore., and Seattle, Wash. All packages are inclusive and not returnable. Zone 1 includes the following States:—Me., N. H., Vt., Mass., Ct., R. I., N. Y., N. J., Pa., Md., Del., Va., W.Va., N. C., Tenn., O., Ind., Mich., Ill., Wis., Minn., Ia., Mo., also the river towns of Burlington, Ia., and Kansas City, Kan. Zone 2 includes N. D., S. D., Neb., Kan., Okla., Ark., La., Miss., Ala., Ga., S. C. and Fla. Zone 3 includes that portion of Montana east of Billings and the states of Wyoming, Colo., N. M. and Texas. Zone 4 includes Wash., Idaho, Montana, Ore., Cal., Nev., Utah and Arizona.

Cardamom, bleached, cs.....lb. 1.45 - 1.60
decorticated, cs.....lb. 1.20 - 1.30
green, Ceylon, afloat, bgs....lb. 1.05 - 1.15
Carob bean flour (see Gum, Locust bean).
Carvol, bots.....lb. 4.00 - 4.25
Cascara sagrada bark, bulk....lb. .20 - .21
Case-hardening mixtures, 30% lump, dms., l.c.l..lb. .09 - —
Casein, dom., 20-30 mesh, bgs., c.l., dlvd..lb. .28 - .29
5 tons, works.....lb. .28¼- .29¼
smaller lots, works.....lb. .28½- .29½
80-100 mesh, c.l., dlvd.....lb. .28½- .29½
5 tons, works.....lb. .28¾- .29¾
smaller lots, works.....bgs.. .29 - .30
Casein, import, Argent., 20-30 mesh, bgs., c.l., c.i.f..lb. .21½- —
80-100 mesh, bgs., c.l., c.i.f..lb. .22 - —
French, 30 mesh, bgs., c.l., duty paid..lb. No prices
New Zealand, 20-30 mesh., c.l., bgs., duty paid..lb. No prices
Cassia, Batavia, No. 1, thin quill, bls..lb. .21½- .22
No. 1, regular, bls.....lb. .20½- .21
shortstick, bls.....lb. .19 - .19½
broken, bls.....lb. .18 - .18½
China, buds, bgs.....lb. .17½- .18
Rolls, select, bls.....lb. .16½- .17
broken, extra, bls.....lb. .15½- .16
Saigon, No. 1, 4-10-4, bls....lb. .35 - .35½
10-6-2, bls.....lb. .35¼- .35¾
all thin, bls.....lb. .36 - .37
Cassia fistula, bskts.....lb. .18 - .19
Castoreum, nat., cns.....lb.12.50 -15.00
Synth, bots.....lb.19.00 - —
Castor beans, Brazilian, ship't, c.&f., N.Y., long ton.78.00 -80.00
Oil (see Oil, castor).
Pomace, dom., 6½% ammon., bgs., c.l., works..ton.15.50 -16.00
import, bgs., c.i.f. ports, shipment..ton. No prices
Celery seed, French, bgs.....lb. .90 - .95
Indian ..lb. .50 - .51
Celluloid scrap (see Pyroxylin scrap).
Cellulose, acetate, flake, gran., frt. alld..lb. .30 - —
Acetate-butyrate, high (36.5% butyryl content), 100-lb. ctn., 5,000 lbs. and up, frt. alld. lb. .45 - —
1,000-4,800 lbs., frt. alld.lb. .46 - —
100-900 lbs., frt. alld....lb. .47 - —
smaller pkgs., works.....lb. .48 - —
medium (15.5 or 17.0%), 100-lb. ctns., 5,000 lbs. and up, frt. alld..lb. .43 - —
1,000-4,900 lbs., frt. alld.lb. .44 - —
100-900 lbs., frt. alld....lb. .45 - —
smaller pkgs., works.....lb. .46 - —
acetate-propionate, high (31.5% propionyl content), 100-lbs. ctn., 5,000 lbs. and up, frt. alld..lb. .45 - —
1,000-4,900 lbs., frt. alld.lb. .46 - —
100-900 lbs., frt. alld....lb. .47 - —
smaller pkgs, works.....lb. .48 - —
Triacetate, flake, frt. alld...lb. .30 - —
Cerium hydrate, dms., works..lb. .60 - —
oxalate, USP, bbls., works...lb. .35 - —
kgs., works.....lb. .37 - —
Chalk, precip., papermakers, bgs., c.l., works..ton.32.50 - —
rubbermakers, bgs., c.l., works, ton.30.00 - —
other industries, and paints, bgs., c.l., works..ton.40.00 - —
drugs, dentiffices and cosmetics, ton lots..lb. .02¾- —
Chamomile flowers, Hungarian, genuine, cs..lb. .85 - 1.00
Roman, bls.....lb. 3.25 Nom.
Charcoal, softwood, gran., bgs., c.l., dlvd., Ala., Del., Ga., Ky., Md., Miss., N. J., N. Y., N. C., S. C., Tenn., Va., W. Va..ton.35.40 - —
Colo. ..ton.32.00 - —
Conn., Me., Mass., N. H., R. I., Vt..ton.35.80 - —
Ill. (except river point). Minn., Neb., Wis..ton.27.00 - —
Indiana ..ton.31.00 - —
Ill. (river points), Mo., Okla., Tex. (except El Paso), Ia..ton.25.00 - —
Kansas, El Paso, Tex., ton.26.00 - —
Michigan ..ton.32.80 - —
Ohio ..ton.32.80 - —
Penn. ..ton.34.80 - —
Utah ..ton.36.00 - —
Willow, powd., bbls.....lb. .06 - .07
Chestnut extract, clarif., 25% tan., bbls., c.l., works..lb. .0240- —
l.c.l., bbls., works.....lb. .0265- —
tanks, works.....lb. .0190- —
Chillies (see Pepper, red).
China clay, dom., dry-grd., air-float, 99.75%, 300 mesh, bgs., c.l., works..ton. 9.50 - —
l.c.l., works...ton.10.00 -16.00
bulk, c.l., works..ton. 7.60 - —
200 mesh, bgs., c.l., works..ton. 8.50 - —
l.c.l., works...ton. 9.50 -15.50
wet-grd., silk-bolt, 99.9%, 325 mesh, bulk, c.l., works.. ton. 9.50 - —
paper bgs., c.l., works, ton.12.50 - —
import, white, lump, bulk, c.i., ex dock, Balto., Boston, Norfolk Phila..ton.18.60 -23.00
powd., cks., l.c.l., ex whse., ton.45.00 - —
Chloral hydrate, jars, 1,000 lbs.lb. .93 - 1.02
500 lbs.....lb. .96 - 1.05
100 lbs.....lb. .98 - 1.07
25 lbs.....lb. 1.00 - 1.09
1-10 lbs.....lb. 1.05 - 1.12
dms., 1,000 lbs.....lb. .90 - —
500 lbs.....lb. .93 - —
100 lbs.....lb. .95 - —
Chlorinated rubber, standard, c.l., ctns., works..lb. .32 - —
100 lbs., ctns.....lb. .35 - —
smaller lots.....lb. .38 - —
Chlorine,[2,5] liq., cyls., c.l., dlvd., N.Y..lb. .05¼- —
contracts, dlvd., N. Y....lb. .05¼- —
l.c.l., dlvd. N. Y.....lb. .07¼- —
tanks, single units, works, frt. equald..100 lbs. 1.75 - 2.00
multiple unit, 3 or over, works, frt. equald..100 lbs. 1.90 - 2.25
2, works, frt. equald., 100 lbs. 2.40 - 2.75
1, works, frt. equald., 100 lbs. 2.90 - 3.25
Chloroform, tech., 650-lb. dms.lb. .20 - —
100 lb. dms.....lb. .22 - —
50-lb. dms.....lb. .23 - —
USP, 650-lb. dms.....lb. .30 - —
100-lb. dms.....lb. .32 - —
50-lb. dms.....lb. .33 - —
Chlorpicrin, com'l, 180-lb. cyls., frt. alld..lb. .80 - —
100-lb. cyls., frt. alld.....lb. .85 - —
25-lb. cyls., works.....lb. 1.00 - 1.15
1-lb. bot., case 2, works, lb. 1.25 - —
Chrome acetate, powd., 24%, bbls., lb. .22 - —
solut., 8½%, cs., bbls.....lb. .07¾- .08½
Cake, bulk, c.l., works.....ton.16.00 - —
Green (see Green, chrome).
Oxide (see Green, chrome).
Sulphate, pearls, dms., 100 lbs., lb. .40 - —
powd., dms., 100 lbs.....lb. .45 - —
scale, dms., 100 lbs.....lb. .45 - —
Trioxide (see Acid, chromic).
Yellow (see Yellow, chrome).
Chrysarobin, 5-lb. bot.....lb. 5.00 - —
Cinchona bark, quill, USP, 10 in., medium, cs..lb. .85 - .90
20 in., thick, cs.....lb. .85 - .90
20 in., medium, cs.....lb. .85 - .90
USP, broken quill, red, bgs..lb. .20 - .21
yellow, bgs.....lb. .20 - .21
Cinchonidine, small crys., cns., 100 ozs..oz. .80 - —
Sulphate, N.F., cans., 100 ozs.oz. .63 - —

Cinchonidine buyers must pay a surcharge of 8½c. per oz. to cover present war risk insurance, higher ocean freight rates and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchonine, small crys., cns., 100 ozs..oz. .62 - —
large cryst., cns., 100 ozs.oz. .66 - —
Sulphate, N.F., cns., 100 ozs.oz. .42 - —

Cinchonine buyers must pay a surcharge of 8½c. per oz. to cover present war risk insurance, higher ocean freight rates and other expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchophen, USP, 25-lb. fib. dms., lb. 3.55 - 3.60
1 and 5-lb. bots.....lb. 3.70 - 3.80
100 lbs., dms.....lb. 3.50 - —
Cinnamic alcohol (see Alcohol, cinnamic).
Aldehyde, 90-100% pure, cbys., cns..lb. 1.25 - 1.60
Cinnamon, Ceylon, 2 bls.....lb. .25½- .26
3 bls.....lb. No stocks
Citral, bots., cns.....lb. 3.00 - 4.00
Citrine ointment, jars.....lb. .98 - 1.00
Citronellal, bots., dms.....lb. 1.50 - 2.25
Citronellol, bots., dms.....lb. 1.75 - 2.00
Clove, Amboyna, bgs.....lb. .25 - .26
Zanzibar ..lb. .15¾- .15¾
Clover tops, red, bgs.....lb. .35 - .40
dom., bgs.....lb. .30 - .35
Coaltar, coal-gas, crude, bbls., c.l., works..bbl. 7.50 - 7.75
l.c.l., works.....bbl. 8.25 - 8.50
tanks, works.....gal. .07½- .09
refd., bbls., c.l., works....bbl. 8.00 - 8.25
l.c.l., works.....bbl. 8.75 - 9.00
tanks, works.....gal. .08½- .10
water-gas, crude, dms., c.l., works..dm. 7.50 - —
l.c.l., works.....dm. 8.25 - —
refd., dms., c.l., works...dm. 8.00 - —
l.c.l., works.....dm. 8.75 - —
Cobalt acetate, bbls., kgs., dlvd. lb. .80½- —
Carbonate, powd., bgs., works, lb. 1.58 - —
Chloride, kgs, works.....lb. .85 - —
Hydrate, bbls.....lb. 1.98 - —
Linoleate, paste, 3%, dms...lb. .31 - —
solid, 8½%, bbls.....lb. .33 - —
Oleate, bbls.....lb. .25 Nom.
Oxide, black, kgs.....lb. 1.84 - —
Resinate, fused A, bbls.....lb. .13½- —
1 %, cobalt oxide, bbls....lb. .13 - —
2 %, cobalt oxide, bbls....lb. .14 - —
3½%, cobalt oxide, bbls....lb. .17½- —
precip., dms., dlvd.....lb. .34 - —
Sulphate, dms.....lb. .65 - —
Cocaine, hydrochloride, 100 ozs., cns..oz. 9.75 - —
Cochineel, gray, bgs.....lb. .37 - .38
Teneriffe, silver, bgs.....lb. .38 - .39
Cocoa butter, bulk, c.l., bgs...lb. .22½- .23
Cocillana bark, bgs.....lb. .22 - .23
Codeine, cns., 100 ozs.....oz.11.70 - —
Hydrochloride, cns., 100 ozs.oz.10.50 - —
Phosphate, cns., 100 ozs.....oz. 9.00 - —
Sulphate, cns., 100 ozs.....oz. 9.50 - —
Codliver oil (see Oil, codliver).
Cohosh, black, root, bls.....lb. .07 - .08
Blue, root, bls.....lb. .07 - .08
Colchicine, bots., cns.....oz.36.00 - —
Colchicum seed, bgs.....lb. 2.50 Nom.
Collodion, USP, dms., 325 lbs..lb. .15 - —
cns., 25 lbs.....lb. .19 - .20
flexible, USP, dms., 325 lbs..lb. .17 - —
cns., 25 lbs.....lb. .21 - .22
Colocynth pulp, bls.....lb. .95 - 1.00
Colombo root, bls.....lb. .22 - .23
Coltsfoot leaves, bgs.....lb. .35 - .40
Condurango bark, bgs.....lb. .10 - .11
Conium leaves, bls.....lb. .30 - .32
Copaiba, balsam, Para, cns....lb. .32 - .33
S. A., USP, cns.....lb. .34 - .35
Copper acetate, normal, bbls., dlvd..lb. .24 - —
smaller containers, dlvd..lb. .26 - —
Carbonate, 52-54%, bbls.....lb. .18 - .20½
Chloride, anhyd., bbls.....lb. .19½- —
cryst. ..lb. .13½- .14½
Cyanide, tech., bbls.....lb. .34 - .38
Iodide, bots.....lb. 5.15 - 5.19
Metal, [1,2,3] electrolytic....lb. .12 - .12½
Nitrate tech., cryst., bbls....lb. .16 - .18½
Oleate, precip., bbls.....lb. .20 - —
Oxide, black, bbls., tons, works, lb. .19½- .21
Red, com'l, kgs., f.o.b. N. Y., lb. .20 - .22
Resinate, precip., bbls.....lb. .15 - .16
Sulphate, 99%, cryst., bbls., c.l., f.o.b. works..100 lbs. 5.00 - 5.50
l.c.l., 16-50 bbls., same basis, 100 lbs. 5.15 - 5.65
6-15 bbls., same basis, 100 lbs. 5.25 - 5.75
1-5 bbls., same basis, 100 lbs. 5.50 - 6.00
monohydrated, dms., c.l. dealers, f.o.b. works..100 lbs. 8.95 - —
l.c.l., dealers.....100 lbs. 9.95 - —
Copperas, cryst., gran., bgs., c.l., works..ton.17.00 - —
bbls., c.l., works.....ton.20.00 - —
l.c.l., 25 or over, works, 100 lbs. 1.55 - —
1-4, works.....100 lbs. 2.00 - —
bulk, c.l., works.....ton.14.00 - —
Copra, Coast, ship.....lb. .0410- —
Coriander, bgs.....lb. .11¼- .11¾
bleached, bgs.....lb. .12½- .13
Corn silk, bls.....lb. .22 - .23
Corn sugar, tanners', chipped, bgs., c.l., dlvd..100 lbs. 4.05 - —
slabs, bbls., c.l.....100 lbs. 3.41 - —
solid, bbls., c.l.....100 lbs. 3.53 - —
Syrup, 42°, bbls., c.l..100 lbs. 3.52 - —
43°, bbls., c.l.....100 lbs. 3.57 - —
Corrosive sublimate, cryst., dms., 50 lbs. or more..lb. 2.39 - —
gran., powd., dms., 50 lbs. or more..lb. 2.24 - —
Cottonroot bark, bls.....lb. .14 - .15
Cottonseed, hull ash, 32-36% pot-ash, bgs., dlvd..unit-ton. 1.00 - —
meal, 8%, Southeast, mills..ton.37.00 -37.50
Coumarin, 5 lbs. or more, 25-lb. cns..lb. 2.75 - 3.00
5-lb. cns.....lb. 2.85 - 3.10
1-lb. cns.....lb. 3.00 - 3.25
1-oz. cns.....lb. 3.35 - 3.60
less than 5 dms., cns.....lb. 4.15 - 4.65
Cramp bark, genuine, bls.....lb. .30 - .65
so-called, bls.....lb. .06 - .07
Cranesbill root, bls.....lb. .10 - .13

Cream of tartar, gran. or powd., bbls., 5,000 lbs., one shipm't. lb. .57½- —
smaller lots, bbls. lb. .58 - —
kgs. lb. .58½- —
Creosote, beechwood, cbys., dms. lbs. .80 - .85
bots. lb. 1.00 - 1.04
hardwood, USP, bots. lb. .60 - .77
Pine, dms. gal. .28 - —
Carbonate, bots., cbys. lb. 2.10 - 2.30
Oil, crude, tanks, works. gal. .13½- .14½
Coaltar, solution, tanks, works. gal. .122 - .132
refd., bbls., l.c.l., works. gal. .26 - —
tanks, works. gal. .18 - .18½
Cresol,[6] USP, dms., c.l., works. lb. .10¼- .10¾
l.c.l., same basis. lb. .10¾- .11¼
special resin grade, dms., c.l., works. lb. .09¼- .09¾
l.c.l., same basis. lb. .09¾- .10¼
Crotonaldehyde, 97%, 55 and 110 gal., l.c.l., works. lb. .15 - —
5 and 10-gal. dms., works. lb. .18 - —
Cryolite, syn., c.l., frt. alld. E. of Miss. River. lb. .08½- —
l.c.l., works. lb. .09¼- —
natural, c.l. 100 lbs. 8.75 - —
l.c.l. 100 lbs. 9.25 - —
Cube root, powd., 5% rotenone, bbls., f.o.b. N.Y.C. lb. .30 - .32
4% rotenone prices are 3c. per lb. less.
Cubeb berries, XX, bgs. lb. .48 - .50
powd., gs. lb. .53 - .54
Culver's root, bls. lb. .22 - .24
Cumin seed, Morocco, bgs. lb. .18½- .19
Cyprus, bgs. lb. .18¼- .18¾
Indian, bgs. lb. .17 - .17½
Persian, bgs. lb. .17½- .18

Cutch, Borneo, extract, solid, contract, f.o.b. N.Y., duty paid. lb. .04¾- —
Cyanamide, 22% N, pulv., bgs., dlvd., contracts. unit-ton. No prices
Cyanide-chloride, mixture, 45%, gran., dms. lb. .10¾- —
lump, dms. lb. .09¾- —
75%, gran., dms. lb. .15 - —
Cyclohexane, 98-100%, dms., wks. lb. .16 - —
Cyclohexanol, 98-100%, dms., wks. lb. .23 - —
Cyclohexanone, 98-100%, dms., works. lb. .32 - —
Cyclopropane, USP, cyls., dlvd. gal. .27 - —

D

Damiana leaves, bls. lb. .15 - .16
Dandelion root, bls. lb. .60 - .65
Decanol, normal, tech., 360 lbs., dms., dlvd. lb. .35 - —
Deertongue leaves, bls. lb. .12 - .14
Degras, common, dom., bbls. lb. .08½- .08¾
neutral, dom., bbls. lb. .16 - .19
Derris root, powd., 5% rotenone, bbls., f.o.b. N. Y. lb. .30 - .34
4% rotenone prices are 3c. per lb. less.
Derris, extract, 30% rotenone, bulk, cns. lb. 3.50 - 4.25
Dextrin, British gum, c.l., f.o.b. Chicago. 100 lbs. 4.25 - —
l.c.l., f.o.b. Chicago. 100 lbs. 4.35 - —
Corn, canary, bgs., c.l., f.o.b. Chicago. 100 lbs. 4.00 - —
l.c.l., f.o.b. Chicago. 100 lbs. 4.80 - —

Dextrin, corn, white, bgs., c.l., f.o.b. Chicago. 100 lbs. 3.95 - —
l.c.l., f.o.b. Chicago. 100 lbs. 4.15 - —
Potato, bgs., dom., c.l. lb. .09¼- —
l.c.l., bgs. lb. .10 - .10½
Diacetone (see under Alcohol).
Diacetyl, bots. lb. 9.50 -11.00
Diamyl ether, dms., c.l., works, lb. .085 - —
l.c.l., works. lb. .092 - —
tanks, works. lb. .073 - —
Phthalate, dms., c.l., dlvd. lb. .21 - —
l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .20 - —
Diamylamine, dms., c.l., works, lb. .47 - —
l.c.l., works. lb. .50 - —
Diamylene, dms., c.l., works. lb. .095 - —
l.c.l., works. lb. .102 - —
tanks, works. lb. .085 - —
Diamylnaphthalene, dms., l.c.l., works. lb. .17 - —
Diamylphenol (2, 4), dms., c.l., works. lb. .17 - —
l.c.l. lb. .20 - —
Diatomaceous earth, dom., natural, bgs., c.l., f.o.b. Pacific cst. ton.22.00 -25.00
l.c.l., ex whse. ton.45.00 - —
purified, bgs., c.l., f.o.b. Atlantic seaboard. ton.35.00 -39.00
l.c.l., ex whse. ton.85.00 -90.00
chemically pure, bgs., c.l., f.o.b. Atlantic seaboard. lb. .07 - —
l.c.l., ex whse. lb. .10 - .16
Import, Algerian, bgs., c.l., f.o.b. ton. No prices
Mexican, white, bgs., c.l., f.o.b. lb. .02 - .03
l.c.l. lb. .04 - .06

FOR MORE THAN 50 YEARS...

Soda ash is one of the most important and basic of industrial chemicals. Michigan Alkali has been a dependable source of both Light Soda Ash and Dense Soda Ash in pure and uniform condition for more than 50 years. Today, Michigan Alkali continues to produce chemicals of high quality for the needs of National Defense and of Industry.

Crude bicarbonate being discharged from a filter wheel. This bicarbonate is calcined to produce pure soda ash.

MICHIGAN ALKALI COMPANY
FORD BUILDING, DETROIT, MICHIGAN

NEW YORK • CHICAGO • CINCINNATI • ST. LOUIS • WYANDOTTE

DISTRIBUTORS IN ALL PRINCIPAL CITIES • *MANUFACTURERS:* SODA ASH • CAUSTIC SODA BICARBONATE OF SODA • CALCIUM CHLORIDE • CHLORINE • CALCIUM CARBONATE • DRY ICE

Dibutylamine, dms., c.l., works, lb. .50 - —
l.c.l. lb. .53 - —
tanks, works lb. .48 - —
Dibutyl ether (see Ether, butyl).
Phthalate,[2] dms., c.l., dlvd. lb. .19 - .20
l.c.l., dlvd. lb. .19½- .20½
tanks, dlvd. lb. .18 - .19
cns., works. lb. .23½- .25½
Sebacate, dms., works. lb. .45 - .47
Tartrate, dom., dms. lb. .87 - —
Dicalcium phosphate (see Calcium phosphate dibasic).
Dichlorethyl ether, dms., c.l., works. lb. .15 - —
l.c.l., works. lb. .16 - —
tanks, works. lb. .14 - —
Dichloropentanes, dms., c.l., works. lb. .032 - —
l.c.l. lb. .04 - —
tanks lb. .025 - —
Diethanolamine, dms., c.l., works, lb. .23½- —
l.c.l., works. lb. .24½- —
tanks, works. lb. .22½- —
Diethylamine, dms., l.c.l., works, lb. .70 - —
Diethylamino ethanol, l.c.l., dms., works, frt. alld. E. of Miss. river, l.c.l., dms. lb. .75 - —
Diethylanilin, dms. lb. .40 - —
Diethylcarbonate, com'l, dms. lb. .25 - —
refd., 99%, dms. lb. .35 - —
Oxalate, dms., l.c.l., dlvd. lb. .28 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .20 - —
l.c.l. lb. .20½- —
tanks lb. .19 - —
Sulphate, dms., c.l., works. lb. .13 - —
l.c.l., works. lb. .14 - —
tanks lb. .12 - —
Diethyleneglycol, dms., c.l., works, lb. .14 - —
l.c.l., works. lb. .15½- —
Monobutylether, dms., works. lb. .22½- .24½
Monoethylether, dms., c.l., works. lb. .14½- —
l.c.l., works. lb. .15½- —
tanks, works. lb. .13½- —
Digitalis leaves, dms. lb. .40 - .42
Diglycol, laurate, c.l. lb. .16 - —
Oleate, light, bbls., c.l. lb. .17 - —
Stearate, bbls., c.l. lb. .22 - —
Di-isobutyl ketone, dms., works. lb. .19 - —
Dillseed, cleaned, bgs. lb. .08¼- .08¾
Dimethyl phthalate, dms., c.l., dlvd. lb. .20 - —
l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .19 - —
Dimethylamine, dms., c.l., dlvd. lb. .85 - —
l.c.l., dlvd. lb. .90 - —
Dimethylanilin, dms., c.l. lb. .23 - —
l.c.l., dms. lb. .24 - —
Dinitrobenzene, bbls., 90% min. lb. .18 - —
Dinitrochlorobenzene, dms. lb. .14 - —
Dinitronaphthalene, kgs. lb. .35 - .38
Dinitrophenol, bbls. lb. .22 - —
Dinitrotoluene, dms. lb. .18 - —
oily, dms. lb. .05 - —
Diorthotoluolguanidin, dms., 2,000 lbs. or over, dlvd. lb. .44 - —
600-1,950 lbs., dlvd. lb. .46 - —
150-450 lbs., dlvd. lb. .47 - —
Dioxan, dms., c.l., frt. alld. lb. .20 - —
l.c.l., same basis. lb. .21 - —
tanks, same basis. lb. .19 - —
Dip oil (see Tar acid oil).
Dipentene, dms. gal. .59 - .51
tanks gal. .51 - —
dest., dist., dms. gal. .55 - .58
tanks gal. .48 - —
Diphenyl, bbls., c.l., works. lb. .15 - —
l.c.l., works. lb. .16 - .20
Oxide, perfume grade, dms. lb. .43 - .45
cns. lb. .48 - .50
Diphenylamine, bbls. lb. .25 - —
Diphenylguanidin, dms., 2,000 lbs. or over, dlvd. lb. .35 - —
600-1,950 lbs., dlvd. lb. .36 - —
150-450 lbs., dlvd. lb. .37 - —
Dimethylethyl carbinol (see Carbinol).
Divi-Divi, Colombian ton.43.00 - —
Venezuelan ton.47.00 - —
Doggrass root, imp. cut, NF, bls. lb. .88 - 1.00
domestic, bls. lb. .36 - .37
Dogwood bark, Jamaica, bls. lb. .08 - .09
Dovers powder, USP, cns. lb. 2.75 - 2.80
Dragon's blood, mass, cs. lb. .65 - .85
reeds, cs. lb. 1.00 - 1.05
Dyes, coaltar (certified colors) for foods, drugs and cosmetics:—
Blue, FD&C blue, No. 1, cns. lb.13.50 - —
FD&C blue, No. 2, cns. lb.13.50 - —
Green FD&C green, No. 2, cns. lb.17.50 - —
FD&C green, No. 3, cns. lb.27.50 - —
FD&C green, No. 1, cns. lb.13.50 - —
Orange, FD&C orange, No. 1, cns. lb. 2.90 - —
FD&C orange, No. 2, cns. lb. 3.65 - —
Red, FD&C red, No. 1, cns. lb. 6.00 - —
FD&C red, No. 2, cns. lb. 3.15 - —
FD&C red, No. 3, cns. lb.17.50 - —
FD&C red, No. 4, cns. lb. 5.75 - —
FD&C red, No. 32, cns. lb. 4.15 - —
Yellow, FD&C yellow, No. 1, cns. lb. 8.50 - —
FD&C yellow, No. 3, cns. lb. 2.65 - —
FD&C yellow, No. 4, cns. lb. 2.65 - —
FD&C yellow, No. 5, cns. lb. 3.15 - —
FD&C yellow, No. 6, cns. lb. 3.15 - —
Dyes, coaltar (certified colors), for drugs and cosmetics:—
Black, D&C black, No. 1. lb. 8.35 - —
Blue, D&C blue, No. 6. lb.13.50 - —
Brown, D&C brown, No. 1, cns. lb.12.35 - —
Green, D&C green, No. 5, cns. lb.12.35 - —
D&C green, No. 6, cns. lb.12.35 - —
Orange, D&C orange, No. 3, cns. lb. 8.35 - —
D&C orange, No. 4, cns. lb.15.35 - —
D&C orange, No. 10, cns. lb.15.85 - —
D&C orange, No. 11, cns. lb.17.35 - —
Red, D&C red, No. 5. lb. 6.00 - —
D&C red, No. 17. lb. 8.35 - —
D&C red, No. 18. lb.18.35 - —
D&C red, No. 19, cns. lb.15.35 - —
D&C red, No. 22, cns. lb. 8.35 - —
D&C red, No. 33. lb.13.35 - —
D&C red, No. 37, cns. lb.12.35 - —
Yellow, D&C yellow, No. 7, cns. lb. 8.35 - —
D&C yellow, No. 3, cns. lb. 8.35 - —
D&C yellow, No. 11. lb.10.35 - —
Dyes, coaltar (certified colors), for external use drugs and cosmetics:—
Blue, Ext. D&C blue, No. 1, cns. lb.12.35 - —
Green, Ext. D&C green, No. 1, cns. lb.12.35 - —
Red, Ext. D&C red, No. 1, cns. lb.10.35 - —
Ext. D&C red, No. 3. lb.21.85 - —
Ext. D&C red, No. 8. lb. 7.85 - —
Ext. D&C red, No. 10, cns. lb.12.35 - —
Ext. D&C red, No. 13, cns. lb.12.35 - —
Yellow, Ext. D&C yellow No. 1, cns. lb. 8.85 - —

Dyes—Gum, Copal

Dyes, coaltar, for general uses (numbers are those of Colour Index scale):—
36 Chrome yellow 2G....lb. .65 - .70
40 Chrome yellow R....lb. .50 - 1.00
53 Victoria violet....lb. .80 - 1.00
165 Lake red C....lb. .70 - .80
170 Fast red A....lb. .56 - .60
180 Fast red VR....lb. 1.50 - 1.60
189 Lake red R, paste....lb. .85 - .90
189 Lake red R, powd....lb. 3.00 - 3.10
Sulphur tan....lb. .30 - .50
202 Chrome blue black U.lb. .32 - .40
204 Chrome black A....lb. 1.75 - 2.00
208 Fast red blue R....lb. .75 - 2.00
216 Chrome red B....lb. 1.75 - 2.00
272 Cloth red 2B....lb. .60 - .80
280 Fast cyanin 5R....lb. .90 - 1.00
299 Chrome black F....lb. .60 - .65
307 Fast cyanin black B.lb. .80 - .85
326 Direct cast scarlet....lb. 2.00 - 2.25
304 Paper yellow....lb. .83 - .90
365 Chrysophenin G....lb. .58 - .70
394 Direct violet N....lb. 1.25 - 1.35
382 Direct scarlet B....lb. 1.50 - 1.75
387 Direct violet B....lb. 1.00 - 1.30
401 Developed black BHN, lb. .45 - .60
406 Direct blue 2B....lb. .25 - .30
415 Direct orange R....lb. .60 - .70
419 Direct red F....lb. .75 - .85
420 Direct brown M....lb. 1.00 - 1.10
448 Benzo purpurin 4B...lb. .54 - .56
495 Benzo purpurin 10B..lb. .40 - .50
502 Direct azurin G....lb. .75 - .80
512 Direct blue RD....lb. .80 - 1.00
518 Direct pure blue 6B..lb. 1.10 - 1.25
520 Direct pure blue....lb. .50 - 1.00
529 Direct fast black, FF.lb. .55 - 1.00
581 Direct black EW....lb. .25 - .50
582 Direct black RX....lb. .35 - .45
592 Direct green B....lb. .75 - .80
594 Direct green G....lb. 1.00 - 1.05
596 Direct brown 3GO....lb. .85 - 1.00
620 Direct yellow R....lb. 1.25 - 1.50
698 Acid violet....lb. 1.00 - 3.00
812 Primulin....lb. .50 - .52
814 Direct fast yellow....lb. 2.00 - 2.25
845 Nigrosin (water soluble), lb. .35 - .50
1177 Indigo, 20 p.c. paste..lb. .15 - .18
Benzo fast black L...lb. .90 - 1.00
Sulphur black....lb. .20 - .25
Sulphur blue....lb. .40 - 1.00
Sulphur brown....lb. .25 - .50
Sulphur maroon....lb. .40 - —
Sulphur olive....lb. .25 - .54
Sulphur yellow....lb. .30 - .50
Zambesi black....lb. .75 - .80

Black:—
865 Nigrosin derivatives..lb. .38 - .62

Blue:—
1075 Alizarin astrol base..lb.15.00 - —
1078 Alizarin cyanin green base..lb. 6.00 - —

Brown:—
Brown ....lb. 1.15 - —

Green:—
1078 Alizarin cyanin green.lb. 5.00 - —
Green ....lb. .75 - —

Orange:—
24 Sudan I....lb. .75 - —
Red shade....lb. .75 - —

Red:—
73 Sudan II....lb. 1.05 - —
258 Sudan IV....lb. .95 - —
749 Rhodamine B (oil pink), lb. 2.50 - —
1080 Anthraquinone violet base..lb. 6.00 - —
680 Oil violet....lb. .50 - —

Yellow:—
15 Amidoazobenzene yellow..lb. .90 - —
17 Amidoazotoluene yellow, lb. .75 - —
61 Yellow OB....lb. 1.40 - 2.00

Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher; f.o.b. sellers' works or warehouse):—
Black:—
864 Nigrosin....lb. .38 - .47
Blue:—
860 Indulin....lb. .60 - .70
Brown:—
331 Bismarck brown....lb. 1.50 - —
Green:—
637 Malachite green base.lb. 2.00 - —
Orange:—
20 Chrysoidin G....lb. .95 - —
21 Chrysoidin R....lb. .95 - —
Red:—
677 Fuchsin, magenta, base, lb. 7.25 - —
749 Rhodamine B....lb. 4.75 - —
Yellow:—
67 Amidoazotoluene yellow, lb. .75 - —
655 Auramine....lb. 2.00 - —
800 Chinolin yellow SS...lb. 2.00 - —
Violet:—
680 Methyl violet base....lb. .85 - —

Dyes, water-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).
Black:—
246 Naphthol blue black S.lb. .50 - —
873 Methylene gray....lb. 1.50 - —
Blue:—
714 Patent blue A....lb. 1.05 - 1.10
729 Victoria blue B....lb. 1.85 - —
861 Indulin....lb. .87 - —
909 New blue R....lb. 1.30 - —
922 Methylene blue....lb. 1.00 - —
1054 Alizarin saphirol B...lb. 1.90 - —
1180 Indigotin IA....lb. .85 - —
Brown:—
234 Resorcin brown Y....lb. .65 - —
235 Resorcin dark brown R, lb. .66 - —
231 Bismarck brown G....lb. .47 - .62
332 Bismarck brown R...lb. .47 - .62
793 Phosphin....lb. 4.65 - —
Green:—
5 Naphthol green B....lb. 1.00 - —
637 Malachite green....lb. 1.95 - —
662 Brilliant green....lb. 2.00 - —
696 Guinea green B....lb. 1.15 - —
737 Wool green S....lb. .58 - —
924 Methylene green B...lb. 1.55 - —
1078 Alizarin cyanin green.lb. 2.25 - —
Orange:—
10 Chrysoidin G....lb. .44 - —
21 Chrysoidin R....lb. .41 - —
27 Orange G....lb. .50 - —
151 Orange Y....lb. .30 - —
161 Orange R....lb. .34 - —
31 Amidonaphthol red G.lb. .42 - —
37 Amidonaphthol red 6B, lb. .68 - —
79 Ponceau R....lb. .48 - —
88 Fast red B....lb. 1.05 - —
176 Fast red A....lb. .54 - —
179 Azorubin....lb. .60 - .62
183 Crocein scarlet 3BX...lb. .72 - .75
185 Cochineal red A....lb. .60 - —
252 Brilliant crosein M...lb. .68 - —
677 Fuchsin....lb. 2.10 - —
749 Rhodamine B....lb. 3.50 - —
752 Rhodamine 6G....lb. 4.50 - —
768 Eosin G....lb. 1.50 - —
841 Safranin....lb. 1.45 - —

Dyes, water-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse):—
Violet:—
680 Methyl violet B....lb. .75 - —
681 Crystal violet C....lb. 1.75 - —
695 Acid violet 4BN....lb. .88 - —
Yellow:—
10 Naphthol yellow S....lb. .88 - —
138 Metanil yellow....lb. .53 - —
636 Fast light yellow....lb. 1.25 - —
639 Xylene light yellow...lb. 1.15 - —
640 Tartarzin....lb. .80 - —
655 Auramine....lb. 1.27 - —
Dyes, natural (see name of article).

E

Echinacea root, bls....lb. .18 - .19
Egg albumen (see Albumen).
yolk, dried, dom., bbls....lb. .92 - .95
imported....lb. .85 - .87
Elder flowers, bright, bls....lb. .85 - 1.00
Elecampane root, bls....lb. .14 - .15
Elm bark, grinding, bls....lb. .11 - .12
powd., bbls., bxs....lb. .19 - .20
select, bndls....lb. .19 - .21
Emetine hydrochloride, bots...oz.24.00 -28.80
Ephedra, bls....lb. .12 - .18
Ephedrine, USP hemihydrates, tins, 1,000 ozs..oz. .60 - —
100 ozs....oz. .70 - —
anhyd., dms., 1,000-oz. lots.oz. .65 - —
100-oz. lots....oz. .75 - —
Hydrochloride, tins, 1,000-oz. lots..oz. .45 - —
100-oz. lots....oz. .55 - —
Sulphate, cryst., tins, 1,000-oz. lots..oz. .43 - —
100-oz. lots....oz. .53 - —
Epsom salt, tech., bgs....100 lbs. 1.80 - 1.75
bbls....100 lbs. 1.90 - —
Epsom salt prices on technical and USP are on the basis of freight equalized with Baltimore, Carteret, N. J., Chicago, Cincinnati, Cleveland, Houston, New Orleans, New York.
USP, cryst., dom., bgs., c.l., 100 lbs. 2.00 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.25 - —
smaller lots....100 lbs. 2.50 - —
bbls., c.l....100 lbs. 2.10 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.35 - —
smaller lots....100 lbs. 2.60 - —
kgs., c.l....100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.60 - —
smaller lots....100 lbs. 2.85 - —
dried, bgs., l.c.l....lb. .08 - .09
Ergot, USP, cns., dms....lb. 1.80 - 2.00
Eserine, bots....oz.50.00 -72.00
Salicylate, bots....oz.42.00 -45.00
Sulphate, bots....oz.42.00 -45.00
Ether, acetic (see Ethyl acetate).
Butyl, l.c.l., dlvd....lb. .26 - .28
Ethyl (see Ether, sulphuric).
Nitrous, conc., bots., 100 lbs., lb. .73 - —
Sulphuric, conc., 310-lb. dms.lb. .11 - —
27-lb. dms....lb. .16 - —
Synth., dms., c.l., work....lb. .10 - —
l.c.l., works....lb. .11 - —
tanks....lb. .08 - —
USP, anesthesia, hospitals, 1-lb. cns..lb. .52 - .58
Ethyl acetate,[2] 85-90%, dms., c.l., frt. alld..lb. .08½- .09¼
l.c.l., frt. alld....lb. .09 - .10
tanks, frt. alld....lb. .07½- .08½
95-98%, dms., c.l., frt. alld.lb. .08¾- .09¾
l.c.l., frt. alld....lb. .09¼- .10¼
tanks, frt. alld....lb. .07¾- .08¾
NF, 390-lb. dms....lb. .10 - —
cns., 35 lbs....lb. .14 - .15
Acetoacetate, dms., c.l., wks.lb. .29½- —
l.c.l., dms., works....lb. .30 - —
Benzoate, bots....lb. 1.00 - 1.25
Bromide, tech., dms....lb. .50 - .55
Caproate, cns....lb. 1.06 - —
Chloride, dms....lb. .18 - .20
Cinnamate, cns....lb. 3.50 - 3.75
Formate, cns., dms....lb. .25 - .26
Iodide, bots....lb. 3.50 - 3.60
Lactate, 55-gal. dms., works, lb. .33½- —
5-gal. dms., works....lb. .37½- .39½
Oenanthate, dms....lb. .75 - 1.25
Oxalate, dms., frt. alld....lb. .25 - —
Oxyhydrate, bots....gal. 4.00 - 6.00
Silicate, l.c.l., dms., wks....lb. .77 - —
Vanillin, 25-lb. lots, cns....lb. 4.75 - 6.00
5-lb. lots, cns....lb. 4.80 - 6.05
1-lb. lots, cns....lb. 4.95 - 6.15
Ethylcellulose, std. cans, 5,000 lbs. or more, frt. alld..lb. .45 - —
less than 5,000 lbs., same basis..lb. .47 - —
Ethylene, dichloride, dms., c.l., works, E. of Rockies, frt. alld..lb. .0742- —
West of Rockies, same basis..lb. .0792- —
l.c.l., works, E. of Rockies, frt. alld..lb. .0795- —
West of Rockies, same basis..lb. .0841- —
Ethyleneglycol, dms., c.l....lb. .14½- —
l.c.l....lb. .15½- .15¾
tanks....lb. .13½- —
Monobutylether, dms., c.l., wks. lb. .16½- —
l.c.l., works....lb. .17½- .20½
tanks, works....lb. .15½- —
monoethylether, dms., c.l., works..lb. .14½- —
l.c.l., works....lb. .15½- .16½
tanks, works....lb. .13½- —
Monoethylether, acetate, dms., c.l., works....lb. .11¼- —
l.c.l., dms....lb. .12¾- .15½
tanks, works....lb. .10½- —
Monomethylether, dms., c.l., works..lb. .15½- —
l.c.l., works....lb. .16½- —
tanks, works....lb. .14½- —
Ethylidinaniline, dms....lb. .45 - .47½
Eucalyptol, cns., dms....lb. 1.15 - 1.25
Eucalyptus leaves, bls....lb. .11 - .12
Eugenol, cns., dms....lb. 2.40 - 2.50
Euphorbia, bls....lb. .09 - .10

F

Feldspar, enamel, 100 mesh, bulk, works..ton.14.00 -17.50
l.c.l., minimum 2 tons..ton.17.00 -20.50
glass, 20 mesh, bulk, works.ton. 9.75 -12.25
l.c.l., minimum 2 tons...ton.12.75 -16.25
pottery, bulk, Me., works...ton.17.00 -19.00
N. C., works....ton.17.09 -19.00
l.c.l., minimum 2 tons.ton.20.00 -23.00
Fennel seed, Argentine, bgs...lb. .13 - .13½
Indian, bags....lb. .09 - .09½
French, bgs....lb. No stocks
German, large, bgs....lb. No stocks
Roumanian, bgs....lb. .11¾- .12
Fenugreek, seed, bgs....lb. .06¾- .07¼
Ferric, sulphate, anhyd., c.l., works..ton.35.00 - —
l.c.l....ton.40.00 - —
Film scrap, colors, dark, cs., 1,000 lbs. or over, works..lb. .12 - —
smaller lots, works....lb. .13 - —
light, cs., 1,000 lbs. or over, works..lb. .13 - —
smaller lots, works....lb. .15 - —
water white, cs., 1,000 lbs. or over, works..lb. .14 - —
smaller lots, works....lb. .15 - —
Fir balsam, Canada, cns.....gal.13.50 -15.00
Oregon, bbls....gal. 1.25 - 1.35
Fish berries, bgs....lb. .26 - .27
Fish scrap, menhaden, dried, 11-12% ammon., 15% bone phos., bulk, Chesapeake factories, contracts, futures...unit-ton. 4.75 & .10
meal, bgs., f.o.b. Baltimore...ton.69.00 -70.00
6-7% ammon., 3% phosphor. acid, bulk, Chesapeake Bay factories, contracts....unit-ton. 2.75 & .50
sardine, Japanese, 11½% ammon., bgs., c.l.f. ports..ton. No prices
Flake white, dom., bbls....lb. .09 - —
kegs....lb. .11 - —
Tetrahydroxide, bbls....lb. .08 - —
Fleaseed, French, black, bgs..lb. .55 - .60
Indian, blonde, bgs....lb. .11 - .12
Fluorspar, dom., No. 1 ground, bulk, 96-98%, f.o.b. mines..
washed gravel, 85.5 f.o.b. Ky. and-Ill.-Ky. mines.net ton.22.00 -23.00
No. 2, lump, 85.5 f.o.b. Ky. ton, and Ill. mines..net ton.22.00 -23.00
imported, 85.5, duty paid....short ton.26.00 - —
Formaldehyde,[3,4,5,6] bbls., c.l., works..lb. .0550- .0575
l.c.l., works....lb. .06 - .0625
dms., c.l., works....lb. .0515- .0540
l.c.l., works....lb. .0565- .0590
tanks....lb. .04 - .04¼
Formaldehyde prices are under 4½c. to 9½c. OPA ceiling.
Fringetree bark, bls....lb. .14 - .15
Fullers earth, dom., bgs., c.l., f.o.b. Fla., Ga. mines..ton.15.00 - —
import, Eng., bgs., c.l., dlvd. N. Y..ton.30.00 -40.00
Furfural, ref., dms., c.l., works, lb. .15 - —
l.c.l., works....lb. .17½- .20
tech., dms. contracts, 150,000 lbs..lb. .10 - —
c.l., works....lb. .12¼- —
l.c.l., works....lb. .15 - .20
tanks, works....lb. .09 - —
Fusel oil, refd., dms., incl., dlvd., lb. .17¼- .19¼
Fustic, cryst., bgs., No. 1....lb. .32 - —
No. 2..lb. .30 - —
No. 3..lb. .28 - —
extract, bbls., No. 1....lb. .16 - —
No. 2..lb. .15 - —
No. 3..lb. .12½- —

G

G salt, bbls....lb. .45 - —
Galangal root, bls....lb. .11 - .12
Gambier, common, cases....lb. .09½- —
plantation, cases....lb. .12 Nom.
cubes, Singapore, cases..lb. .09½- .10
extract, bbls....lb. .09½- .12
Gasoline[3] at refinery:—
Bayonne, US motor, tanks, ex tax..gal. .07½- .08
California (f.o.b. San Francisco), regular, trucks, tax incl..gal. .14½- —
Gulf Coast, US motor, 72-74 octane, tanks, ex tax...gal. .07½- —
Louisiana-Arkansas, US motor, 72-74 octane, tanks, ex tax..gal. .06¾- .06½
Oklahoma-Texas, US motor, 72-74 octane, tanks, ex tax..gal. .05¾- .06¾
natural, 18-55, tanks....gal. .05¼- —
26-70, tanks....gal. .04¼- —
Gelatin, silver, cs....lb. .80 - 1.00
Gelsemium root, bls....lb. .14 - .15
Gentian root, bls....lb. .70 - .75
grd., bbls., bxs....lb. .72 - .77
powd., bbls., bxs....lb. .74 - .79
Geraniol, 92-96%, cns., dms...lb. 2.50 - 3.50
other grades, cns., dms....lb. 1.50 - 1.90
soap, cns., dms....lb. 1.10 - 1.50
Ginger, African, No. 1, bgs...lb. .31 - .31½
Cochin, bgs....lb. .27½- .28½
Jamaica, bold, bgs....lb. .42 - .43
medium, bgs....lb. .40 - .41
grinding, bright, bgs....lb. .39 - .40
Ginseng root, wild Southern, cs., lb.12.00 -13.00
Glauber's salt, anhyd. (see Soda Sulphate).
cryst., dom., bgs., bbls., c.l., works...100 lbs. 1.05 - 1.28
5 tons or over, works, 100 lbs. 1.15 - 1.35
less than 5 tons, works, 100 lbs. 1.25 - 1.45
import, bgs....100 lbs. No prices
Glue, bone, calcimine type, 24 millipoise, 36 jelly-grams, bgs., c.l., dlvd. East or Midwest....lb. .16 Nom.
l.c.l....lb. .16½ Nom.
86/88, c.l....lb. .15½ Nom.
l.c.l....lb. .16 Nom.
58/82, c.l....lb. .17 Nom.
l.c.l....lb. .17½ Nom.
82/108, c.l....lb. .17½ Nom.
l.c.l....lb. .18 Nom.
hide, calcimine type, 58 millipoise, 135 jelly-grams, bgs., c.l., dlvd. East or Midwest..lb. .19 Nom.
l.c.l....lb. .19½ Nom.
60/164, c.l....lb. .19½ Nom.
l.c.l....lb. .21 Nom.
67/122, c.l....lb. .21½ Nom.
l.c.l....lb. .22 Nom.
75/222, c.l....lb. .24½ Nom.
l.c.l....lb. .25½ Nom.
68/251, c.l....lb. .24½ Nom.
l.c.l....lb. .26½ Nom.
92/283, c.l....lb. .26½ Nom.
l.c.l....lb. .27½ Nom.
102/315, c.l....lb. .27½ Nom.
l.c.l....lb. .28 Nom.
113/347, c.l....lb. .28 Nom.
l.c.l....lb. .29 Nom.
125/379, c.l....lb. .29 Nom.
l.c.l....lb. .30 Nom.
Glue prices for barrel packing are ½c. per lb. higher; grinding charges, 20-40 mesh, ½c. per lb.; 80 mesh, 1c. per lb.
Glycerin[1] (These ceiling prices effective Nov. 10), Zones A and C, C.P., (B.P. 98%), drums..carlots, dlvd..lb. .18¾- —
less carlots, dlvd....lb. .19¼- —
tanks, dlvd....lb. .18½- —
C.P. (USP 95%), drums, carlots, dlvd..lb. .18¼- —
less carlots, dlvd....lb. .18¾- —
tanks, dlvd....lb. .18 - —
Glycerin, dynamite, high gravity, yellow distilled, drums, carlots, dlvd..lb. .18¼- —
less carlots, dlvd....lb. .18¾- —
tanks, dlvd....lb. .18 - —
Soaplye, 80%, drums, carlots, dlvd..lb. .11½- —
less carlots, dlvd....lb. .11½- —
tanks, dlvd....lb. .11½- —
Saponification, 88% to refiners, drums, carlots, dlvd..lb. .12¾- —
less carlots, dlvd....lb. .12¾- —
tanks, dlvd....lb. .12¾- —
Saponification, 88%, for individual uses, drums, carlots, f.o.b. point of manufacture, lb. .13¾- —
less carlots, same basis, lb. .14¾- —
tanks, same basis....lb. .12¾- —
Glycerin prices in Zone B are 2c. higher.

Zone A means all points east of and including N. Dak., S. Dak., Neb., Kansas, Omaha, Texas, Laramie County, Wyo.; Col., east of but not including the following counties:—Jackson, Grand, Gilpin, Jefferson, Douglass, Teller, Fremont, Custer, Huerfano, and Costilla.

Zone B means the territory between Zones A and C, as follows:—Washington, east of and including the following counties:—Okanogan, Chelan, Kittitas, Yakima, Klicjitat; Ore., east of and including the following counties:—Hood River, Wasco, Jefferson, Deschutes, Klamatch; Nev., Ariz., New Mex., that part of Col. west of and including those counties mentioned above; Utah, Wyo., excepting Laramie County; Idaho and Mont.

Zone C means the territory west of Zone B.

Glycine, medicinal, bbls., tins..lb. 1.70 - 2.00
Glycol boriborate, dms....lb. .22 - —
Phthalate, dms....lb. .38 - —
Stearate, dms....lb. .26 - —
Gold, U.S. purchase price....oz.35.00 - —
Chloride, acid brown, both...oz.20.75 -21.00
yellow, bots....oz.18.75 -19.00
Gold-soda chloride, photo., bots., a oz.13.00 - —
USP IX, bots....oz.14.50 -14.75
Gold of pleasure, seed, bgs....lb. .20 - .21
Goldenseal, root, bls....lb. 3.50 - 3.60
powd., bxs....lb. 3.75 - 3.85
Grains of Paradise, bgs....lb. .36 - .38
Graphite, flake (crystal.), 90%, 325 mesh, 50% graphite carbon, bgs., c.l., works..lb. .07 - —
bbls., c.l., works....lb. .07¼- —
l.c.l. works....lb. .07½- —
65% graphite carbon, bgs., c.l., works..lb. .02½- —
l.c.l., works....lb. .03¼- —
bbls., c.l., works....lb. .02¾- —
80% graphite, carbon, bgs., c.l., works..lb. .03¼- —
bbls., c.l., works....lb. .03¾- —
l.c.l., works....lb. .04½- —
Grease, house....lb. .08½- .08¾
white....lb. .09¼- .09½
yellow....lb. .08½- .08¾
Wool (see Adeps lanae and Degras).
Green, chrome, CP, dark, light, medium, blue content up to 5%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. river, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. .23 - —
6-10%, bbls., same basis.lb. .24 - —
11-15%, bbls., same basis.lb. .25 - —
16-20%, bbls., same basis.lb. .25½- —
21-25%, bbls., same basis.lb. .26 - —
26-30%, bbls., same basis.lb. .26½- —
31-35%, bbls., same basis.lb. .27½- —
36-40%, bbls., same basis.lb. .29 - —
41-45%, bbls., same basis.lb. .30½- —
46-50%, bbls., same basis.lb. .32 - —
Green, chrome, prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.). Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, ¼c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago
reduced, CP, color content up to 5%, same basis..lb. .08½- —
9-10%, bbls., same basis.lb. .07¾- —
11-13%, bbls., same basis.lb. .07¾- —
14-16%, bbls., same basis.lb. .08 - —
17-19%, bbls., same basis.lb. .08¼- —
20-21%, bbls., same basis.lb. .08½- —
22-23%, bbls., same basis.lb. .08¾- —
24-25%, bbls., same basis.lb. .09 - —
26-27%, bbls., same basis.lb. .09¼- —
28-29%, bbls., same basis.lb. .09½- —
30-31%, bbls., same basis.lb. .10¼- —
32-33%, bbls., same basis. lb. .11¼- —
34-35%, bbls., same basis.lb. .12¾- —
36-40%, bbls., same basis.lb. .14¾- —
41-45%, bbls., same basis.lb. .16¾- —
46-50%, bbls., same basis. lb. .17¼- —
51-55%, bbls., same basis.lb. .17¾- —
56-60%, bbls., same basis.lb. .18¼- —
61-65%, bbls., same basis.lb. .18¾- —
66-70%, bbls., same basis.lb. .19¾- —
71-75%, bbls., same basis. lb. .20¾- —
Oxide, dom., pure, bbls...lb. .25 - —
ceramic, light shades, bbls., c.l. works...lb. .25 - —
l.c.l. works....lb. .30 - —
standard grade, bbls., works..lb. .21 - .23
Paris (see P).
Tunstated, brilliant, kgs....lb. 3.75 - —
emerald, kgs....lb. 2.60 - —
Verdigris (see V).
Green dyes are listed under Dyes.
Grindelia robusta, bls....lb. .09 - .10
Guaiac resin, cs....lb. .80 - .83
strained, cs....lb. .85 - .90
Wood bls....lb. .04 - .05
Guaiacol, liq., dms....lb. 1.75 - 2.01
Carbonate, fib. dms., 25 lbs..lb. 2.40 - 2.74
Gum, guarana, powd., cs....lb. 1.20 - 1.25
Aloe (see A).
Ammoniac, tears, cs....lb. .80 - .83
Arabic, amber sort, cleaned, bgs..lb. .19 - .20
white, sorts, 1, bgs....lb. .33 - .35
powd., bbls....lb. .24 - .26
Asafetida (see A).
Asphaltum (see A).
Benzoin, Siam, cs....lb. 2.50 - 2.60
Sumatra, cs....lb. .24 - .25
Camphor (see C).
Chicle, prime, 33% moisture, bgs., ton lots..lb. .40 - .42
Copal, Congo, 1, water white transparent, bgs., c.l., ex dock or ex whse., N. Y. or San Francisco..lb. .49½- —
Gum, copal, dammar, elemi, kauri, mastic, sandarac, and yacca gum prices on 50,000 lbs. min. apply to assorted lots of gum as well as one grading; l.c.l. prices are ¼c. higher for 10 bgs. or over; ½c. higher for 1-9 bgs.
2. water white, bgs., c.l., same basis..lb. .39½- —
3. selected pale straw bold, bgs., c.l., same basis..lb. .34½- —

Gum, copal, Congo, 4, pale bold straw, bgs. c.l., same basis..lb. .24 - —
5, pale straw bold, bgs., c.l., same basis..lb. .22½- —
6, pale amber bold, bgs., c.l., same basis..lb. .21½- —
7, pale straw bold, bgs., c.l., same basis..lb. .17 - —
8, light amber bold, bgs., c.l., same basis..lb. .17 - —
9, medium light amber bold, bgs., c.l., same basis..lb. .18½- —
10, rescraped hard amber bold, bgs., c.l., same basis, lb. .18½- —
11, hard dark amber bold, bgs., c.l., same basis..lb. .12½- —
12, selected bold sorts, bgs., c.l., same basis..lb. .11½- —
13, dark sorts bold, bgs., c.l., same basis..lb. .09½- —
14, selected, fully scraped, ivory, bgs., c.l., same basis..lb. .23½- —
15, ordinary ivory sorts, bgs., c.l., same basis..lb. .10½- —
16, inferior ivory sorts, bgs., c.l., same basis..lb. .09½- —
17, pale, fingers, bgs., c.l., same basis..lb. .18½- —
18, pale straw nubs, bgs., c.l., same bais..lb. .19½- —
19, pale straw nubs, bgs., c.l., same basis..lb. .18½- —
20, hard dark amber nubs, bgs., c.l., same basis..lb. .13½- —
21, ordinary selected nubs, c.l., same basis..lb. .12½- —
22, small mixed nubs, bgs., same basis..lb. .10½- —
23, dark mixed nubs, bgs., c.l., same basis..lb. .11½- —
24, No. 1, ivory nubs, bgs., c.l., same basis..lb. .17½- —
25, pale small nubs, c.l., same basis..lb. .10½- —
27, pale small nubs, bgs., c.l., same basis..lb. .10½- —
28, pale dust, bgs., c.l., same basis..lb. .06½- —
Batu, bold scraped, bgs....lb. .11½- —
unscraped, bgs.....lb. .10½- —
chips, bgs.....lb. .07½- —
dust, bgs.....lb. .07 - —
nubs and chips, bgs.....lb. .07½- —
black, bold, scraped, bgs..lb. .12½- —
unscraped, bgs.....lb. .08 - —
nubs and chips, bgs.....lb. .07½- —
Hiroe, Macassar, pale bold, bgs..lb. .17½- —
chips, bgs.....lb. .11½- —
dust bgs.....lb. .07 - —
nubs, bgs.....lb. .13½- —
Singapore, Rasak, bold, bgs., lb. .22½- —
chips, bgs.....lb. .12½- —
dust, bgs.....lb. .07 - —
nubs, bgs.....lb. .17½- —
Manila, Boeas, amber and dark, bskts.....lb. .14 - —
light, bskts.....lb. .15½- —
Loba A, bskts.....lb. .14½- —
B, bskts.....lb. .14½- —
C, bskts.....lb. .13½- —
CNE, bskts.....lb. .10½- —
D, bskts.....lb. .13½- —
DK, bskts.....lb. .10 - —
dust, bskts.....lb. .07½- —
Sambas and white split chips, bskts..lb. .15½- —

Gum, copal, Singapore, dust, bskts..lb. .07½- —
Spirit-soluble, CBB, bskts., lb. .13½- —
DBB, bskts.....lb. .12½- —
MA, bskts.....lb. .10½- —
MB, bskts.....lb. .09½- —
WS, bskts.....lb. .12½- —
Philippine, Manila, amber sorts, bskts..lb. .10½- —
chips, pale, bskts.....lb. .13½- —
pale, small, bskts.....lb. .11½- —
extra pale, sorts, bskts...lb. .13½- —
nubs, bskts.....lb. .14½- —
scraped, bskts.....lb. .15½- —
seeds and dust, bskts....lb. .09½- —
Pontianak, bold, genuine, bgs., lb. .22½- —
mixed, bgs.....lb. .17½- —
split, bgs.....lb. .19½- —
chips, bgs.....lb. .12½- —
nubs, bgs.....lb. .18½- —
Dammar, Batavia, A, cs., same basis as copal..lb. .35¼- —
A/C, cs.....lb. .31½- —
A/D, cs.....lb. .28½- —
A/E, cs.....lb. .25½- —
B, cs.....lb. .34½- —
C, cs.....lb. .28½- —
D, cs.....lb. .25½- —
dust, cs.....lb. .13½- —
E, cs.....lb. .18½- —
F, cs.....lb. .13½- —
Singapore, 1, cs.....lb. .30½- —
2, cs.....lb. .25½- —
3, cs.....lb. .12½- —
chips, cs.....lb. .23½- —
dust, cs.....lb. .13 - —
seeds, cs.....lb. .17½- —
Elemi, cns, same basis as copal..lb. .08½- —
Ester, ordinary, c.l., dms., contract, dlvd. New Eng., N. Y., N. J., Pa., Va., N. C., Ky., Ohio, Ind., Mich., Wis. and Ill..lb. .08½- .09¼
Mont., Idaho, Wyo., Nev., Utah, Col., Ariz., N. Mex. and Western Tex..lb. .09 - .10
Pacific Coast (water shipt.)..lb. .08½- .10
Other points.....lb. .08¾- .10½

For delivery of 3,000 pounds, prices are ½c. per pound higher than the above in each case; for delivery of smaller lots, prices are ½c. per pound higher in each case. Spot prices are ½c. per pound higher.

Euphorbium, cs.....lb. .50 - .55
Galbanum, cs.....lb. 1.40 - 1.50
Gamboge, pipe, cs.....lb. .90 - 1.00
powd., bbls.....lb. 1.05 - 1.10
Ghatti, soluble, bgs.....lb. .11 - .15
superior, bgs.....lb. .09 - .11
Guaiac (see Guaiac resins).
Karaya, bbls., bxs., dms.....lb. .14 - .35
Kauri, brown, XXX, cs., c.l..lb. .60 - —
BX, cs., c.l., same basis..lb. .35 - —
B1, cs., c.l., same basis..lb. .28 - —
B2, cs., c.l., same basis..lb. .24 - —
B3, cs., c.l., same basis..lb. .18½- —
80%, chips, cs., c.l., same basis..lb. .15½- —
pale, XXX, cs., same basis.lb. .61 - —
1, cs., c.l., same basis....lb. .41 - —
2, cs., c.l., same basis....lb. .34 - —
3, cs., c.l., same basis....lb. .17½- —
Kino, tins.....lb. No prices
Locust bean, powd., bbls.....lb. 1.10 - 1.15

Gum, mastic, cs.....lb. 2.85 - 3.00
Myrrh, USP, cs.....lb. .50 - .55
Olibanum, siftings, cs.....lb. .09 - .10
tears, cs.....lb. .20 - .35
Opium (see O.).
Rosin (see R).
Sandarac, cks.....lb. .92 - .95
Scammony, cs.....lb. 1.10 - 1.25
Gum, Talha, bgs.....lb. .08 - .09
Thus, bbls.....280 lbs. 16.50 - —
Tragacanth, Aleppo, 1 cs....lb. 3.25 - 3.40
2 cs.....lb. 2.70 - 2.80
3 cs.....lb. 1.10 - 1.20
Yacca, bgs.....lb. .06½- .07¾
Gypsum, Keene's cement, paper bgs., c.l., f.o.b. Acme, Tex., frt. equald..ton. 22.45 - —
Medicine Lodge, Kan., frt. equald..ton. 17.00 - —
Harlem River, N. Y., frt. equald..ton. 27.65 - —
New Brighton, N.Y.; frt. equald..ton. 27.65 - —
Southard, Oklahoma, frt. equald..ton. 17.00 - —
Sweetwater, Texas, frt. equald..ton. 21.45 - —
plaster of paris, paper bgs., f.o.b. Blue Rapids, Kans., frt. equald..ton. 12.50 - —
Acme, Tex., frt. equald. ton. 12.50 - —
Medicine Lodge, Kans., frt. equald..ton. 12.50 - —
New Brighton, N. Y., frt. equald..ton. 13.00 - —
Southard, Oklahoma, frt. equald..ton. 12.50 - —
Sweetwater, Texas, frt. equald..ton. 12.50 - —
stucco, paper bgs., c.l., f.o.b. Acme, Tex.; Akron, N. Y.; Blue Rapids, Kansas; Clarence Center, N.Y.; Fort Dodge, Ia.; Grand Rapids, Mich.; Gypsum, O.; Harlem River, N. Y.; National City, Mich.; New Brighton, N. Y.; Plasterco, Va.; Portsmouth, N. H.; Roton, Tex.; Saltville, Va.; Southard, Okla.; Sweetwater, Tex.; frt. equald.. ton. 8.00 - —
Terra Alba, dom., paper bgs., c.l., f.o.b. New Brighton, N.Y.; Southard, Okla..ton. 12.00 - —
Harlem River, N. Y..ton. 13.00 -
import, bgs., ex dock....ton. No price

H

Hawthorn berries, bgs.....lb. .45 - .46
Heliotropin, cryst., cns.....lb. 3.00 - 3.40
Hellebore root, write, powd., bbls., lb. .18 - .19
Helonias root, bls.....lb. .60 - .61
Hematine, cryst., bgs., No. 1..lb. .34 - —
No. 2..lb. .30 - —
No. 3..lb. .28 - —
No. 4..lb. .26 - —
No. 5..lb. .24 - —
paste, bxs, No. 1.....lb. .14½- —
No. 2.....lb. .13½- —
No. 3.....lb. .12½- —
Hemlock bark extract, 25%, tan, c.l., bbls., works..lb. .03½- —
l.c.l., bbls., works.....lb. .03¾- —
tanks, works.....lb. .03 - —

Gum, Copal—Insect Flowers

Hempseed, Manchur, bgs.....lb. .09½- .10
Henbane leaves, bbls.....lb. 3.40 Nom.
Henna leaves, bls.....lb. .27 - .28
powd., bbls., bxs.....lb. .30 - .31
Heptane, mixed, 77-115°C., dms., c.l., Group 3..gal. .11 - —
l.c.l., Group 3.....gal. .16 - —
tanks, Group 3.....gal. .09 - —
Normal, 86-100°, dms., c.l., Group 3..gal. .11½- —
l.c.l., Group 3.....gal. .17 - —
tanks, Group 3.....gal. .09 - —
Hexaldehyde, normal, dms., c.l., works..lb. 1.10 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine,[3,5,6] tech., dms., 1,500 lbs. or more, shipment, f.o.b. Perth Amboy or N.Y.C..lb. .32 - —
150 to 1,350 lbs., shipments, same basis..lb. .33 - —
USP, dms., 500 lbs. or more, shipments, same basis..lb. .38 - —
2lb. ctns., same basis.....lb. .40 - —
Hexane, normal, tanks, Group 3, gal. .09½- —
dms., c.l., dlvd., Group 3..gal. .24 - —
l.c.l., 5 or more, dlvd., Group 3..gal. .29 - —
1-5, dlvd., Group 3.....gal. .38 - —
laboratory grade, dms., c.l., Group 3..gal. .14 - —
l.c.l., Group 3.....gal. .25 - —
Hexanol, dms., l.c.l., works...lb. .25 - —
Homatropine hydrobromide, 25 oz., bots..oz. 17.50 -32.00
Hoofmeal, 17-18% ammon., bulk, f.o.b. Chicago..unit. 2.95 - 3.00
Hops, N.F., bls.....lb. .20 - .21
Horehound, bls.....lb. .11 - .12
Hydrangea root, bls.....lb. .08 - .09
Hydrastine, bots., 4 ozs.....oz. 18.00 - —
Hydrochloride, bots., 4 oz....oz. 18.00 - —
Sulphate, bots., 4 ozs.....oz. 18.00 - —
Hydrastinine, 15 grs., bots...bot. 1.95 - —
Hydrastis (see Golden seal).
Hydrofuramide, dms., 100 lbs. or more, works..lb. .30 - —
2lb. ctns., works.....lb. .40 - —
Hydrogen peroxide, USP, bbls..lb. .03¾- .04
100 vols., cbys., E. of Miss. River; West Coast via Panama Canal.....lb. .16 - .18½
Hydroquinone, dealers, bbls., dms. lb. .90 - .94
Hydroxycitronellal, cns.....lb. 5.25 Nom.
Hyoscine hydrobromide, bots.gm. 3.50 - —
Hyoscyamine, bots.....oz. 21.25 -27.50
Hydrobromide, bots.....oz. 21.25 -27.50
Sulphate, bots.....oz. 21.25 -27.50
Hypernic, cryst., bgs., No. 1..lb. .42 - —
No. 2..lb. .34 - —
extract, bbls., No. 1.....lb. .24 - —
No. 2..lb. .19 - —

I

Iceland moss, bls.....lb. .25 - .27
Ichthyol bots.....lb. 4.00 - —
Indian red (see Red, Indian).
Indigo, nat., Madras, cs.....lb. 2.14 - 2.30
synth., liq., bbls.....lb. .16½- .19
powd., bbls.....lb. .74½- .88
Indium metal.....oz. 12.50 - —
Indol, CP, bots.....lb. 35.00 Nom.
Insect flowers (see Pyrethrum).

Lecithin

(Vegetable)

Now available in either Soya Bean Oil or Cocoa Butter carrier for prompt delivery direct from factory.

We Also Solicit Inquiries on These Products . . .

CHOLESTEROL • PYRIDINE • ALPHA PICOLINE
TALC • DIATOMACEOUS EARTH • LECITHIN
TARTARIC ACID • CITRIC ACID • CREAM OF TARTAR

NEUBERG CHEMICAL CORPORATION

441 LEXINGTON AVENUE, NEW YORK CITY • TELEPHONE MURRAY HILL 6-1990

Iodine—Manna Flake

Iodine, crude, jars, 25 lbs.....lb. 1.67 - —
Iodine, resublimed, 5 lbs., 25 lbs. whse., Staten Island..lb. 1.35 - 1.44
resubl., bots., 5 lbs.....lb. 2.10 - —
jars, 50 lbs.....lb. 2.00 - —
Iodoform, dms., 100 lbs.....lb. 3.95 - 4.10
jars .....lb. 4.20 - —
Ionone, alpha, bots.....lb. 2.75 - 2.80
beta, bots.....lb. 3.90 - 3.95
Methyl, alpha, 100%, cns....lb. 4.35 - —
Ipecac root, bgs.....lb. 1.65 - 1.70
powd., bxs.....lb. 1.70 - 1.75
Irish moss, ordinary, bls.....lb. .20 - .25
powd., 80-90 mesh, bbls..lb. .35 - .38
prime bleached, bls.....lb. .32 - .35
Iron acetate, N. F., IV, 100-lb. cbys..lb. .15 - —
djns., 50 lbs.....lb. .16 - —
liquor, bbls., c.l., dlvd....lb. .03 - —
l.c.l., dlvd.....lb. .04 - —
Chloride (ferric), tech., anhydr., 390-lb. dms..100 lbs. 4.65 - 6.25
150-lb. dms.....100 lbs. 5.00 - 6.00
cryst., bbls., works, frt. alld. or equald..lb. .05 - .06
kegs, works, frt. alld. or equald..lb. .07½- .08
liquor, cbys., wks., frt. alld. or equald..lb. .05 - .06
USP X, cryst., bbls.....lb. .07½- —
kegs .....lb. .08½- —
solut. cbys., works, frt. alld. or equald..lb. .06½- .07
djns. .....lb. .07½- —
Citrate, USP VIII, pearls....lb. .72 - .75
powd., cns.....lb. .84 - .87
scales, cns.....lb. .77 - .80
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.30 - —
100-lb. lots.....lb. 3.40 - —
cns., 25 lbs.....lb. 3.52 - —
Hyposulphite, bbls., dms.....lb. 1.50 - 1.60
Iodide, bots.....lb. 3.18 - 3.33
syrup, cbys.....lb. .39 - .40
bots.....lb. .58 - —
Nitrate, red, tech., dms.....lb. .03½- .04
Oxalate, powd., kgs.....lb. .47 - .49
cns. .....lb. .52 - —
scales, cns.....lb. .82 - .85
Oxide, black, bbls., works....lb. .08 - —
Phosphate, ferric, pearls, cns., 50 lbs..lb. .54 - —
25 lbs.....lb. .57 - —
scale, cns., 50 lbs.....lb. .59 - —
25 lbs.....lb. .62 - —
Pyrophosphate, pearls, cns....lb. .59 - .62
scales, cns.....lb. .64 - .67
Reduced, 90%, cs.....lb. .65 - .75
Sulphate, tech. (see Coppers and ferric sulphate).
Sulphate, USP, cryst., 275-lb. bbls..lb. .04½- —
dms., 100 lbs.....lb. .06½- —
Iron-ammonia citrate, brown, gran., 2,000-lb. lots, dms.. lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
pearls, 2,000-lb. lots, dms.. lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
scales, 2,000-lb. lots, dms.. lb. .44 - —
200-lb. lots, dms.....lb. .47 - —
Prices on green are the same as for brown
Iron-ammonia oxalate, bbls...lb. .23½- —
dms., kgs.....lb. .25½- —
Iron-soda oxalate, bbls.....lb. .23½- —
dms. .....lb. .25½- .26½
Isobutyl acetate, 55-gal. dms., works...lb. .0660 - —
tanks, works.....lb. .0760 - —
Propionate, dms., works...lb. .102 - —
Isopentane, 50-gal. dms., single, works..gal. .45 - —
10-gal. dms., single, works..gal. .55 - —
Isophorone, dms., works.....lb. .25 - —
Isopropylamine, dms., works...lb. .35 - —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., 5 gals., E. of Rockies, frt. alld..lb. .12 - —
c.l., E. of Rockies, frt. alld. lb. .08½- —
l.c.l., E. of Rockies, frt. alld..lb. .09 - —
tanks, E. of Rockies, frt. alld..lb. .07½- —
Alcohol (see Alcohol, isopropyl).
Ether, dms., 5 gals., frt. alld. gal. .55 - —
55 gals., c.l., E. of Miss., frt. alld..gal. .35 - —
55 gals., c.l., W. of Miss., frt. alld..gal. .39 - —
l.c.l., E. of Miss., frt. alld., gal. .44 - —
tanks, E. of Miss., frt. allo., gal. .28 - —
W. of Miss., frt. alld.. gal. .29 - —

J

Jaborandi leaves, bls.....lb. .11 - .12
Jalap root, NF, bls.....lb. .40 - .51
powd., bbls., bxs.....lb. .45 - .58
resin, lump, 100-lb. lots, cns.lb. 5.85 - —
powd., bxs.....lb. 5.90 - —
Juniper berries, bgs.....lb. .70 - .90

K

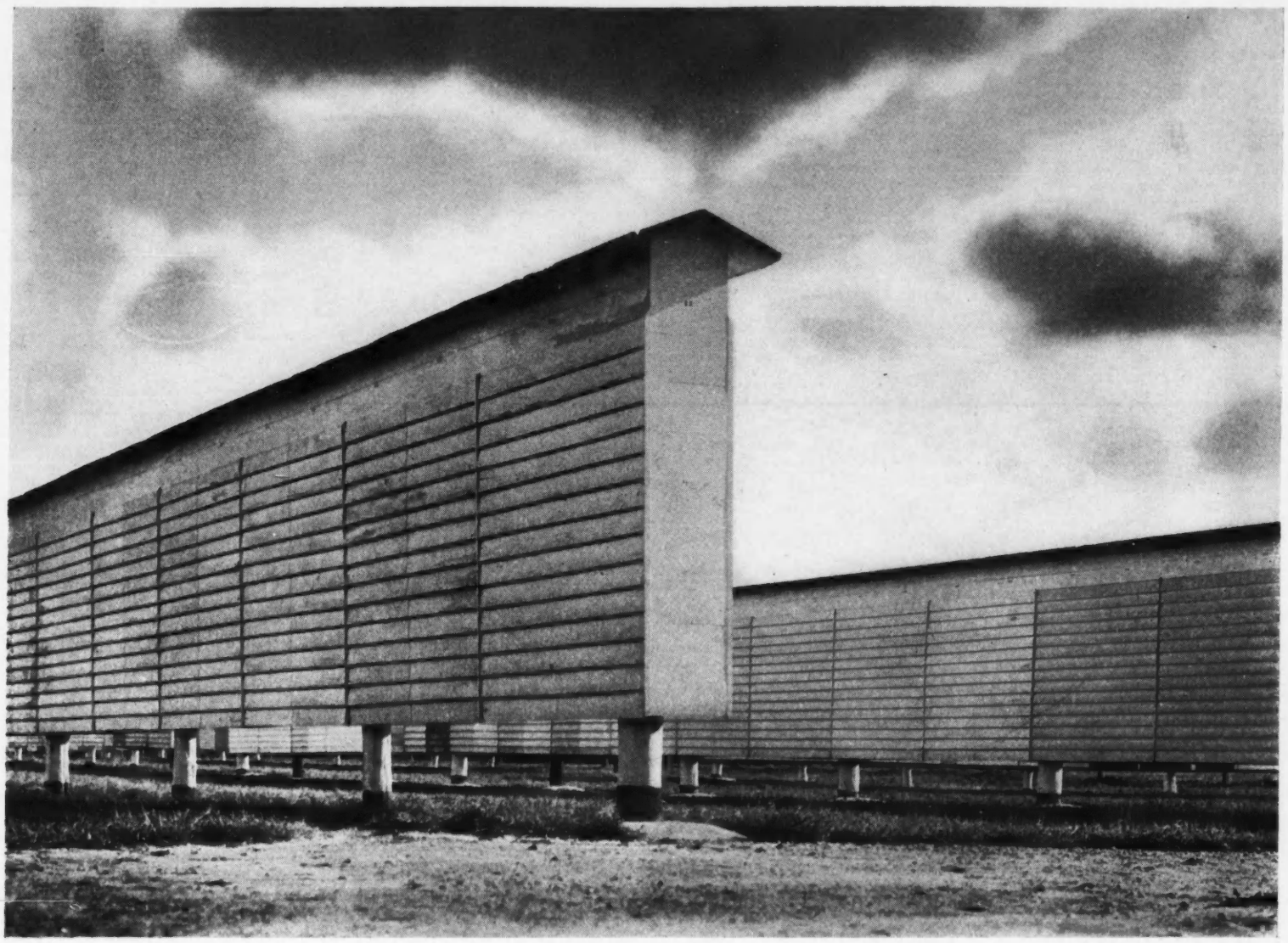
Kamala, tins.....lb. .33 - .34
Kaolin (see China clay).
Kava kava root, bls.....lb. .14 - .16
Kerosene[3] at refinery:—
Bayonne, 41-43 w.w., tanks, gal. .0530- —
California (f.o.b. San Francisco), truck..gal. .11½- —
Gulf ports, p.w., bulk.....gal. .07½- —
Louisiana - Arkansas, 41-43 w.w., blk..gal. .04⅝- .04⅝
Oklahoma-Texas, 41-43 w.w., tanks..gal. .04⅝- .04⅝
Pennsylvania, 45 w.w., tanks, gal. .05½- .06
Kola nuts, bgs.....lb. .08 - .09

L

Lady slipper root, bls.....lb. .43 - .45
Lanolin (see Adeps lanae).
Lard, city, tubs.....100 lbs. 10.60 -10.75
Middlewestern, trcs....100 lbs. 10.10 -10.20
Neutral, trcs.....100 lbs. 11.75 -12.00
Western, choice, trcs..100 lbs. 10.20 -10.30
Compound, trcs.....100 lbs. 15.50 -15.75
Larkspur seed, bgs.....lb. 4.00 Nom.
Laurel berries, bls.....lb. .25 - .30
Leaves, Grade, bls.....lb. .58 - .59
Portuguese, bls.....lb. .22 - .23
Lavender flowers, ordinary, bls.lb. .60 - .65
medium, bls.....lb. .83 - .85
select, bls.....lb. .95 - 1.00
Lead,[2] metal (see paint market).
Acetate, white, broken, bbls., to. .12 - .12½
cryst., bbls.....lb. .12 - .12½
gran., bbls.....lb. .12⅝- .13½
powd., bbls.....lb. .12⅝- .13½
Arsenate, bgs., c.l.....lb. .09 - .11
l.c.l., bgs.....lb. .09½- .11½
Lead arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. or over; no frt. or truck allowance for works or whse. pick ups.
Blue, basic sulphate, bbls., c.l., dlvd. E..lb. .06⅝- —
l.c.l., dlvd. E. dlvd., Ariz., Cal., Col., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo .lb. .07 - —
l.c.l., dlvd., Ariz., Cal., Col., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo..lb. .07½- —
Carbonate (see Lead, white).
Chloride, fib. dms., 100 lbs....lb. .49 - —
Iodide, NF V, powd., 5-lb. bots. lb. 2.80 - —
jars .....lb. 2.60 - —
Linoleate, pale, precip., dms., lb. .19 - —
Metal (see daily quotations in market report)
Metallic, paste, 200-lb. cont., f.o.b. works..lb. .10 - —
5-lb. cont., f.o.b. works....lb. .22 - —
Nitrate, bbls.....lb. .11 - .14
Peroxide, powd., bbls., tech..lb. .23 - —
Oleate, bbls.....lb. .18½- .20
Red, dry, 95% or less Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore. and Wash.....lb. .0860- —
Other points.....lb. .0885- —
l.c.l., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. Cascade Mts. in Ore. and Wash...lb. .09 - —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash...lb. .09½- —
Colo., Mont., N. Mex., Wyo..lb. .09½- —
Other points.....lb. .09⅝- —
smaller lots, Ala., etc. lb. .09½- —
Ariz., etc.....lb. .10 - —
Colo., etc.....lb. .09⅝- —
other points.....lb. .09½- —
97%, Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ala., etc..lb. .0885- —
other points.....lb. .0860- —
l.c.l., 5 tons, dlvd., Ala., etc..lb. .08½- —
Ariz., etc.....lb. .09⅝- —
Colo., etc.....lb. .07½- —
other points.....lb. .09 - —
smaller lots, dlvd. Ala.. etc..lb. .09⅝- —
Ariz., etc.....lb. .10½- —
Colo., etc.....lb. .10 - —
other points.....lb. .09½- —
98%, Pb_3O_4, bbls., c.l. (20 tons), dlvd., Ala., etc. lb. .0910- —
other points.....lb. .0885- —
l.c.l., 5 tons, dlvd. Ala., etc..lb. .09½- —
Ariz., etc.....lb. .10 - —
Colo., etc.....lb. .09⅝- —
other points.....lb. .09½- —
smaller lots, dlvd. Ala., etc..lb. .10 - —
Ariz., etc.....lb. .10½- —
Colo., etc.....lb. .10½- —
other points.....lb. .09⅝- —
in oil, 95% min., 100-lb. kgs., lb. .12½- —
Resinate, fused, 15%, bbls...lb. .09½- —
pale, bbls.....lb. .11½- —
Silicate, bgs., 5 tons.....lb. .0650- —
smaller lots.....lb. .0701- —
Stearate, bbls.....lb. .25 - —
Sulphate (see Lead, white basic sulphate).
Titinate, bgs. or bbls., c.l. basic sulphate, bbls., c.l., (20 tons), works, frt. alld..lb. .10½- —
l.c.l., 5 tons, one delivery, E., frt. alld..lb. .10½- —
Pac. Cst., ex whse....lb. .10½- —
smaller lots, E. frt. alld..lb. .10⅝- —
Pac. Cst., ex whse....lb. .10⅝- —
White, dry, basic carbonate, bbls., c.l., dlvd. Ariz., Calif., Colo., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash. and Wyo..lb. .07⅝- —
other points.....lb. .07½- —
l.c.l., dlvd. Ariz., etc...lb. .08 - —
other points.....lb. .07⅝- —
basic sulphate, bbls., c.l., dlvd. Ariz., etc.....lb. .07 - —
other points.....lb. .06⅝- —
l.c.l., dlvd. Ariz., etc...lb. .07½- —
other points.....lb. .07 - —
in oil, 100-lb. kgs., consumers. lb. .12½- —
dealers .....lb. .11½- —
painters .....lb. .12½- —
Consumers' prices and painters' prices are ½c lower on orders of 500 lbs. or more.
Lecithin, 100%, cns., f.o.b. N. Y. or Chi..lb. 2.50 - —
edible, grade 1, dms., c.l., same basis..lb. .45 - —
l.c.l., same basis.....lb. .47½- .65
grades 2 or 3, dom., c.l., same basis..lb. .47½- —
l.c.l., same basis.....lb. .50 - .67½
grade 4, dms., c.l., same basis, lb. .50 - —
l.c.l., same basis.....lb. .52½- .70
purified, cs., dms., c.l., same basis..lb. .65 - —
l.c.l., same basis.....lb. .67½- .85
tech., grade 1, dms., c.l., same basis..lb. .35 - —
l.c.l., same basis.....lb. .37½- .55
grade 2 or 3, dms., c.l., same basis..lb. .37½- —
l.c.l., same basis.....lb. .40 - .57½
grade 4, dms., c.l., same basis. lb .40 - —
Lecithin prices quoted above are for goods packed in 25, 50 or 100-lb. dms. When goods are packed in 500-lb. dms. prices are 1c. per lb. less.
Lemon peel, bls.....lb. .20 - .25
Licorice extract, mass, cs.....lb. No prices
powd., bbls.....lb. No prices
root, cuttings, bls.....lb. .28 Nom
powd., bbls., bxs.....lb. .33 Nom
select, bdls., cs.....lb. .90 Nom
Lime, chemical (quicklime), lump or pebble, bulk, f.o.b.
Adams, Mass.....ton. 8.00 - —
Bellefonte, Pa.....ton. 7.00 - —
Berkley, W. Va.....ton. 7.00 - —
Carey, Ohio.....ton. 7.00 - —
Cedar Hollow, Pa...ton. 8.50 - —
Crab Orchard, Tenn.ton. 6.25 - —
Eagle Mountain, Va..ton. 7.00 - —
Farnams, Mass.....ton. 8.00 - —
Gibsonburg, Ohio...ton. 7.00 - —
Hannibal, Mo.....ton. 6.50 - —
Keystone, Ala.....ton. 6.25 - —
Knoxville, Tenn....ton. 6.25 - —
Limedale, Ark.....ton. 7.00 - —
Longview, Ala.....ton. 6.25 - —
Manistique, Mich...ton. 8.00 - —
Martinsburg, W. Va.ton. 7.00 - —
Menominee, Mich...ton. 8.00 - —
Mitchell, Ind.....ton. 6.50 - —
Newala, Ala.....ton. 6.25 - —
Rincon, Cal.....ton. 13.00 - —
Ripplemead, Va.....ton. 7.00 - —
Riverton, Va.....ton. 7.00 - —
Rockland, Me.....ton. 8.00 - —
San Francisco, Cal..ton. 13.00 - —
Scioto, Ohio.....ton. 6.50 - —
Springfield, Mo.....ton. 7.00 - —
Woodville, Ohio....ton. 7.00 - —
York, Pa.....ton. 7.00 - —
Hydrated, paper bgs., f.o.b.
Adams, Mass.....ton. 8.50 - —
Bellefonte, Pa.....ton. 8.50 - —
Berkley, W. Va.....ton. 8.50 - —
Buffalo, N. Y.....ton. 10.00 - —
Carey, Ohio.....ton. 8.50 - —
Cedar Hollow, Pa....ton. 8.00 - —
Crab Orchard, Tenn.ton. 9.00 - —
Eagle Mountain, Va.ton. 8.50 - —
Farnams, Mass.....ton. 8.50 - —
Gibsonburg, Ohio...ton. 8.50 - —
Hannibal, Mo.....ton. 8.50 - —
Keystone, Ala.....ton. 9.00 - —
Knoxville, Tenn....ton. 9.00 - —
Le Roy, Minn.....ton. 10.00 - —
Lime Crest, N. J....ton. 8.50 - —
Limedale, Ark.....ton. 9.00 - —
Longview, Ala.....ton. 9.00 - —
Louisville, Ky.....ton 14.50 - —
Manistique, Mich...ton. 9.50 - —
Marblehead, Ohio....ton 9.50 - —
Martinsburg, W. Va.ton. 8.50 - —
Mitchell, Ind.....ton. 9.00 - —
Newala, Ala.....ton. 9.00 - —
Potoskey, Mich.....ton. 9.00 - —
Port Island, Mich...ton. 9.00 - —
Rapid City, S. D....ton. 12.00 - —
Ripplemead, Va.....ton. 9.00 - —
Rockland, Me.....ton. 9.00 - —
San Francisco, Cal..ton. 16.00 - —
Springfield, Mo.....ton. 9.00 - —
Woodville, Ohio....ton. 8.50 - —
York, Pa.....ton. 8.50 - —
Spray, paper bgs., f.o.b. Adams, Mass..ton. 9.50 - —
Bellefonte, Pa.....ton. 9.00 - —
Carey, Ohio.....ton. 11.00 - —
Farnams, Mass.....ton. 9.50 - —
Gibsonburg, Ohio....ton. 11.00 - —
Lime Crest, N. J....ton. 8.50 - —
Marblehead, Ohio....ton. 11.00 - —
Rockland, Me.....ton. 10.00 - —
Scioto, Ohio.....ton. 10.00 - —
Woodville, Ohio....ton. 11.00 - —
York, Pa.....ton. 9.00 - —
Lime salts (see Calcium).
Lime-sulphur, dry, dealers, bgs., c.l., E. of and incl. N. Dak., S. Dak., Neb., Kans., Okla., Tex..lb. .07½- .08½
dms., same basis.....lb. .10½- —
400 lbs., or more, bgs., same basis..lb. .07⅝- .08⅝
dms., same basis.....lb. .11 - —
less than 400 lbs., same basis..lb. .08½- .09½
dms., same basis.....lb. .12 - —
Solution, Zone 1, dms., consumers..gal. .16 - —
Zone 2, tanks, dealers, wks., gal. .08½- —
30-50, dms.....gal. .11 - .16
Zone 3, tanks, dealers, dlvd. gal. .07½- —
30-50 dms.....gal. .10½- .14½
Zone 4 ,tanks, dealers, wks., gal. .08 - —
dms., wks., except Cal.gal. .12 - —
Zone 5, tanks, dealers, dlvd., gal. .10½- —
dms. .....gal. .12 - —
Zone 6, tanks, dealers....gal. .07½- —
30-50 dms.....gal. .10 - .14
Prices for lime sulphur solution are f.o.b warehouse points, freight allowed. Zone 1: includes Ga., S. C., Ala., N. C., except the counties of Ashe, Surry, Stokes, Rockingham and Alleghany; Tenn., east of Tenn river. Zone 2: New England States. Zone 3, Ark., Ohio, Ind., Ill., Ia., Ky., Wis., Minn., Mo. and Tenn. west of Tenn. River; Penn., eastern tier, and W. Va. western tier Zone 4: West of Rocky Mountains, except southern California, which makes up Zone 5. Zone 6: N. Y. east of Herkimer, N. J., Md., Del., Va., Pa.—all counties lying east of the western boundary of Bedford, Blair, Center, Clinton and Potter. W. Va.—counties of Mineral, Hampshire, Morgan, Berkeley, Jefferson, and Hardy, N. C.—counties of Ashe, Alleghany, Surry, Stokes and Rockingham.
Linalool, cns.....lb. 3.75 - 4.00
Linalyl acetate, 70%, cns.....lb. 5.50 - 6.00
90%, cns.....lb. 6.50 - 6.75
92%, cns.....lb. 7.00 - 7.25
Linden flowers, bls.....lb. .70 - .75
without leaves, bls.....lb. .55 - .60
Linseed, meal, bgs.....ton. 30.00 - —
Litharge, com'l powd., bbls., 20-tons, dlvd., Ala., Ariz., Ark.; Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore. and Wash..lb. .0760- —
dlvd., other points.....lb. .0735- —
5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash..lb. .08 - —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash..lb. .08½- —
Colo., Mont., N. Mex., Wyo..lb. .08½- —
Other points.....lb. .07⅝- —
smaller lots, dlvd., Ala.lb. .08½- —
Ariz., etc.....lb. .09 - —
Colo., etc.....lb. .08⅝- —
Other points.....lb. .08½- —
Lithium bromide, bbls., 100 lbs., works, frt. equal'd..lb. 1.90 - —
50 lbs., works.....lb. 1.93 - —
25 lbs., works.....lb. 1.95 - —
Carbonate, NF VI, 250-lb. bbls. lb. 1.25 - —
100-lb. kgs.....lb. 1.30 - —
Lithium, chloride, 25-lb. jars..lb. 1.65 - 1.70
Citrate, 250-lb. bbls.....lb. 1.40 - —
25-lb. dms.....lb. 1.45 - —
100-lb. kgs.....lb. 1.40 - —
Fluoride, bbls.....lb. 2.10 - 2.25
Iodide, 5-lb. bots.....lb. 5.20 - —
25-lb. jars.....lb. 5.05 - —
Lithopone, titanated (high-strength), bgs., c.l. (20 tons)..lb. .05½- —
smaller lots.....lb. .06½- —
bbls., c.l. (20 tons).....lb. .05½- —
smaller lots.....lb. .05⅝- —
Ordinary, bgs., c.l. (20 tons).lb. .0385- —
smaller lots.....lb. .0410- —
bbls., c.l. (20 tons).....lb. .0410- —
smaller lots.....lb. .0435- —
Lithopone in car lots is ¼c. per lb. higher delivered to the Pac. Cst., and in less car lots is ¼c. higher ex whse. Pac. Cst.
Liverwort, leaves, bls.....lb. .55 - .60
Lobelia, herb, bls.....lb. .35 - .37
Seed, bgs.....lb. .40 - .45
Logwood, cryst., bgs., No. 1..lb. .28 - —
No. 2..lb. .26 - —
extract, bbls., No. 1.....lb. .14 - —
No. 2..lb. .13 - —
No. 3..lb. .12½- —
No. 4..lb. .10 - —
solid, bxs., No. 1.....lb. .23½- —
No. 2..lb. .21½- —
Lovage root, dms., bls.....lb. .45 - .50
imported, bls.....lb. .45 Nom
Lupulin, N.F., tins.....lb. 1.65 - 1.70
Lycopodium, cs.....lb. 8.50 - 9.00

M

Mace, Banda, cs.....lb. .45 - .46
Batavia, cs.....lb. .39 - .40
Siauw, cs.....lb. .35 - .36
West Indian, cs.....lb. .51 - .52
Madder, Dutch, bbls.....lb. .22 - .27
Magnesia, arsenate, dms.....lb. .18 - .20
Calcined, tech., USP, bbls., wks..lb. .26 - —
Carbonate, tech., Zone 1, c.l., bgs..lb. .06½- —
bbls. .....lb. .07½- —
kgs. .....lb. .08⅝- —
l.c.l., bgs.....lb. .07½- —
bbls. .....lb. .08½- —
kgs. .....lb. .09⅝- —
Zone 2, c.l., bgs.....lb. .06½- —
bbls. .....lb. .07½- —
kgs. .....lb. .08⅝- —
l.c.l., bgs.....lb. .07 - —
bbls. .....lb. .08¼- —
kgs. .....lb. .09½- —
USP, Zone 1, c.l., bgs.....lb. .08 - —
bbls. .....lb. .08½- —
kgs. .....lb. .09⅝- —
l.c.l., bgs.....lb. .09 - —
bbls. .....lb. .09½- —
kgs. .....lb. .10⅝- —
Zone 2, c.l., bgs.....lb. .08 - —
bbls. .....lb. .08½- —
kgs. .....lb. .09⅝- —
l.c.l., bgs.....lb. .08¾- —
bbls. .....lb. .09¼- —
kgs. .....lb. .10½- —
Other points.....lb. .08 - —
Magnesia:—Zone 1—Mass., Conn., R. I., N.Y., N.J., Pa., D. of C., Del. and Md. c.l. shipments, frt. equald. with Phillipsburg, Ambler, Plymouth Meeting, Valley Forge and New York. On l.c.l. shipments, frt. alld., including dlvd. storedoor. Magnesia prices are f.o.b. Plymouth Meeting. Zone 2—Balance of U.S.; prices f.o.b. Plymouth Meeting, Ambler, Phillipsburg, Valley Forge, and New York.
Magnesium, chloride, anhyd., dom., bbls., dlvd..lb. .13 - —
flake, dom., bbls., wks., c.l., ton.32.00 - —
l.c.l., bbls., wks.....ton. 39.00 -42.00
Hydroxide, med., 200-lb. bbls.lb. .25 - —
25-lb. dms.....lb. .30 - —
100-lb. kgs.....lb. .26 - —
Hypophosphite, cns., 100 lbs..lb. 1.45 - —
Oxide (see Calcined).
Palmitate, bbls.....lb. .83 Nom.
Peroxide, 15%, dms., works..lb. 1.00 - 1.35
Silicate (see Talc).
Silicofluoride, bbls.....lb. .22 - .25
Stearate, bbls., ctns., 1 ton..lb. .31 - —
smaller lots.....lb. .33 - —
Sulphate (see Epsom salt).
Trisilicate, 1,000-lb. contracts, dms..lb. .37 - —
smaller lots, dms.....lb. .42 - —
cs., 500-lb. lots.....lb. .40 - —
100-lb. lots.....lb. .42 - —
5-lb. cns.....lb. .60 - —
Magnesite, cal., dom., bgs...ton. 72.00 -80.00
imports, bgs., duty paid..ton. No prices
dead-burned, dom., bulk, c.l., f.o.b. Chewelah, Wash..ton. 22.00 -25.00
Malva flowers, black, bls.....lb. .90 - .95
blue, bls.....lb. .90 Nom.
Leaves, bls.....lb. .40 - .45
Manaca root, bls.....lb. .23 - .24
Mandrake root, bls.....lb. .25 - .26
Manganese acetate, dms.....lb. .26½- —
Arsenate, bgs.....lb. .12 - .12½
Borate, tech., bbls.....lb. .15 - .16
Carbonate, bbls.....lb. .19 - —
Chloride, bbls.....lb. .14 Nom.
Dioxide, African, battery, 84-87%, bbls., 28-40 tons, works, ton.71.50 - —
5-15 tons, works.....ton. 74.50 - —
½, 4 tons, works.....ton. 79.50 - —
Caucasian, 85-90%, bbls., c.l., works..ton. 74.00 - —
l.c.l., 5 tons, works....ton. 77.00 - —
smaller lots, works...ton. 82.00 - —
burlap bgs., c.l., works, ton. 71.75 - —
l.c.l., 5 tons, works....ton. 74.75 - —
smaller lots, works...ton. 79.75 - —
paper bgs., c.l., works....ton. 70.00 - —
l.c.l., 5 tons, works....ton. 73.00 - —
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.05 - —
100-lb. lots.....lb. 3.15 - —
cns., 25 lbs.....lb. 3.27 - —
Hydrate, bbls., dlvd.....lb. .82 - —
Iodide, bots., 5 lbs.....lb. 5.70 - —
jars, 25 lbs.....lb. 5.55 - —
Linoleate, liquid, 4%, dms...lb. .18 - .19½
solid, precip., 8.2%, bbls...lb. .19 - —
Resinate, fused, 3½%, bbls..ton. .08½- .08½
precip., dms.....lb. .12 - —
Sulphate, anhyd., ton lots, works..lb. .10½- —
single, bbls., works.....lb. .11½- —
fertilizer, 65%, MnSo., bgs., c.l., dlvd., South..ton. 57.00 - —
l.c.l., bgs.....ton. 65.00 -75.00
Mangrove bark, bgs., shipt...ton. 37.00 -38.00
Manna flake, large, cs.....lb. 2.00 Nom.
small, cs.....lb. 1.50 Nom.



Some of the test fences at a National Lead Company Experiment Station, Sayville, L. I.

WHITE LEAD PUTS "WEATHER-FIGHT" INTO PAINT

Call it "weather-fight," gumption, or just plain durability... basic carbonate white lead gives paint the ability to stand up to the weather, as acres of homes and thousands of tests prove.

Here's part of the answer: white lead makes paint distensible, flexible, elastic, tough... qualities due largely to a beneficial reaction between the oil vehicle and the surface of the pigment particles, commonly known as the formation of lead soaps.

And here's another contributing factor: white lead's range of particle sizes enables it to pack densely, thus reinforcing the film.

To build ruggedness into paint, use plenty of white lead. You get not only durability, but also easier brushing and working qualities, improved adhesion, more thorough drying.

And in Dutch Boy you have five distinct basic carbonate white leads to choose from, ranging from a low oil absorption type to one with extra-high hiding and paint thickening power. Thus, you're sure of a white lead exactly suited to your needs.

DUTCH BOY *Basic Carbonate* **WHITE LEADS**

111—*Extra-high hiding and paint consistency.* **333**—*High hiding and paint consistency, but less than 111.* **H.T.S.**—*Medium-high hiding and paint consistency.* **Carter**—*Medium-low oil absorption white lead, made by the Carter Process.* **Dutch**—*Low oil absorption white lead, made by the Dutch Process.*

NATIONAL LEAD COMPANY: 111 Broadway, New York; 116 Oak Street, Buffalo; 900 West 18th Street, Chicago; 659 Freeman Avenue, Cincinnati; 1213 West Third Street, Cleveland; 722 Chestnut Street, St. Louis; 2240 24th Street, San Francisco; National-Boston Lead Company, 800 Albany Street, Boston; National Lead & Oil Co. of Pennsylvania, 1376 River Avenue, Pittsburgh; John T. Lewis & Bros. Company, Widener Building, Philadelphia.

Mannitol—Mica

Mannitol, com'l grade, bbls., ton lots, works..lb. .35 - —
smaller lots, works.....lb. .40 - —
reagent grade, 50-lb. cs., or multiples, works..lb. .55 - —
Marble flour, bgs.....ton.12.00 -14.00
Marjoram, French, No. 1.....lb. .60 Nom.
Tunisan, bls.....lb. .32 - .33
Chilean .....lb. .18 - .18½
Menthol, natural, Chinese, cs...lb. 8.00 - 8.50
Japanese, cs.....lb. 8.00 - 8.50
synthetic, USP, cs.....lb. No prices
technical, 60-lb. cs.....lb. 3.00 - —
smaller lots.....lb. 3.10 - 3.25
Menthyl salicylate, tins, 100-lb. lots..lb. 3.00 - —
25-lb. lots.....lb. 3.10 - —
Mercurial ointment, 30%, pails, 50 lbs.....lb. 1.44 - —
25 lbs.....lb. 1.46 - —
50%, pails, 50 lbs.....lb. 2.09 - —
25 lbs.....lb. 2.11 - —
Mercury (see Quicksilver).
Ammoniated (see White precipitate).
Bichloride (see Corrosive sublimate).
Bisulphate, 5-lb. bots.....lb. 3.02 - —
100-lb. fib. dms.....lb. 2.89 - —
25-lb. jars.....lb. 2.91 - —
Chloride (see Calomel).
Cyanide, cryst.....lb. 4.00 - 4.05
powd.....lb. 4.00 - 4.05
Iodide, red, NF, 5-lb. bots...lb. 4.66 - 4.71
100-lb. fib. dms.....lb. 4.60 - —
yellow, 5-lb. bots.....lb. 4.76 - 4.81
fib. dms., 100 lbs.....lb. 4.70 - —
Mercury, nitrate ointment (see Citrine ointment).
tech. (see Red, mercury oxide).
yellow, tech. (see Yellow, mercury oxide).
NF VI, fib. dms., 50 lbs., or more..lb. 3.35 - —
Oxide, red, NF (see Red precipitate).
Mercury and chalk, 5-lb. cans..lb. 1.98 - —
25-lb. fib. dms.....lb. 1.86 - 1.88
Mesityl oxide, dms., c.l., divd..lb. .11½- —
l.c.l., divd.....lb. .12 - —
Metal leaf, Japanese, pkgs. of 20 books (500 leaves), aluminum, 5½x5½ in..pkg. 2.50 - —
composition, 5½x5½ in.....pkg. 3.00 - —
gold, XX, deep, 23K, 1¾x1¾ in. pkg.15.00 - —
silver, 3¾x3¾ in.....pkg. 3.00 - —
Metanitroparatoluidin, 5bls....lb. 1.05 - 1.10
Metaphenylenediamine, kgs....lb. .65 - —
Metatoluylenediamine, kgs....lb. .70 - —
Methanol, natural, [1,8,6] producer group A, all grades, E. of Miss. R., tanks..gal. .60 - —
dms., c.l.....gal. .66 - —
l.c.l. .....gal. .76 - —
Methanol prices W. of Miss. R. are 3c. per gal higher.
group B, pure, tanks, frt. alld., Zone 1..gal. .50 - —
Zone 2.....gal. .52 - —
Zone 3.....gal. .54 - —
Zone 4.....gal. .54½- —
dms., c.l., Zone 1.....gal. .55½- —
Zone 2.....gal. .57½- —
Zone 3.....gal. .59½- —
Zone 4.....gal. .61½- —
Methanol, natural, group B, dms., l.c.l., Zone 1.....gal. .58½- —
Zone 2.....gal. .75½- —
Zone 3.....gal. .62½- —
Zone 4.....gal. .75½- —
Group B, 95% frt. alld., prices 2c. more than pure, all zones.
97%, frt. alld., prices 1c. more than pure, all zones.

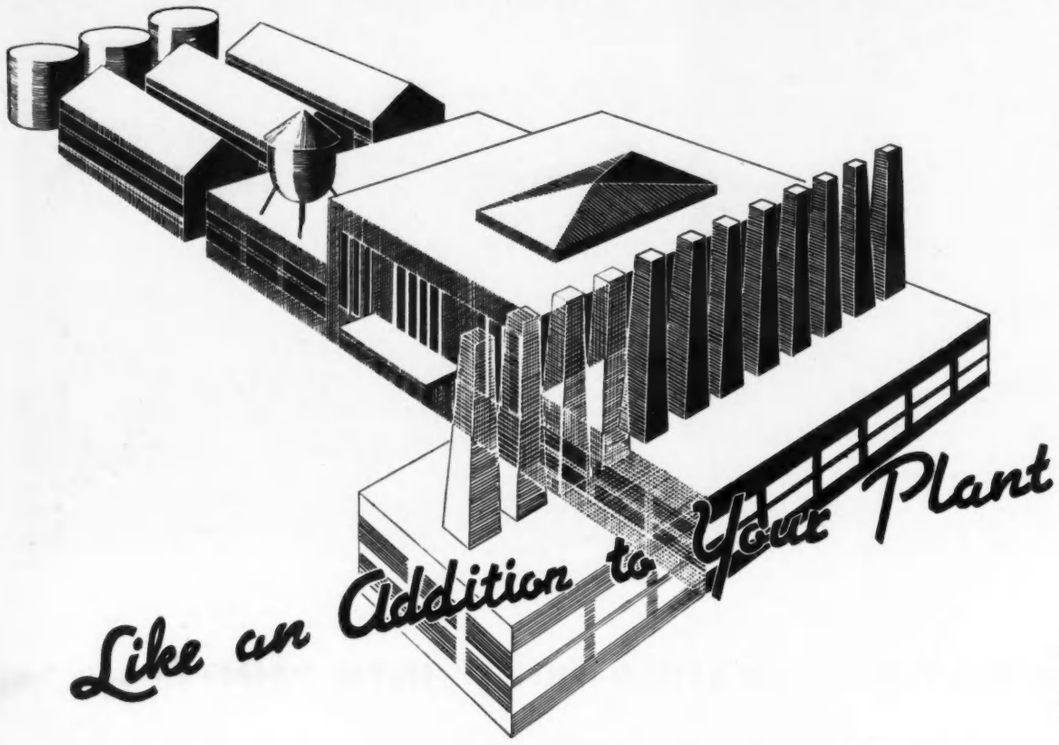
Natural methanol sales zones are:—Zone 1, Conn., Del., D. of C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Tenn., R. I., Vt., Va., W. Va., Wisc.; zone 2, Ala., Ark., Col., Fla., Ga., Kan., La., Miss., Neb., N. D., Okla., S. C., S. D., Tex., Wyo.; zone 3, Los A., San Fran., Seattle, Wash., Portland, Ore.; zone 4, Ariz., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash.

Methanol, synthetic, [3,5,6] pure, dms., c.l., Zone 1, frt. alld..gal. .34½- —
c.l., Zone 1, frt. alld..gal. .34½- —
2, frt. alld.....gal. .36½- —
3, frt. alld.....gal. .38½- —
4, frt. alld.....gal. .40½- —
l.c.l., Zone 1, frt. alld. or divd..gal. .37 - —
2, frt. alld. or divd..gal. .44½- —
3, divd., S. F. and L. A., gal. .41 - —
4, frt. alld. or divd..gal. .52½- —
tanks, Zone 1, frt. alld..gal. .28 - —
2, frt. alld.....gal. .30 - —
3, frt. alld.....gal. .32 - —
4, frt. alld.....gal. .32½- —
Synthetic methanol sales zones are:—Zone 1, Conn., Del., D. C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Penn., R. I., S. C., Tenn., Vt., Va., W. Va., Wis.; Zone 2, Ala., Ark., Col., Fla., Ga., Kans., La., Miss., Neb., N. D., Okla., S. D., Tex., Wyo.; Zone 3, Los Angeles, Cal.; San Francisco, Cal.; also (c.l. only) Portland, Ore., and Seattle, Wash.; Zone 4, Ariz., Cal., N. Mex., Mont., Nev., Idaho, Ore., Utah, Wash.

Methyl acetate, 97-99%, dms., c.l., E. of Miss. R..lb. .10½- .12
W. of Miss. R.....lb. .11½- .13
l.c.l., dms., divd., E. of Miss. R..lb. .11 - .12½
W. of Miss. R.....lb. .12 - .13½
tanks, divd. E. of Miss. R. lb. .09½- —
W. of Miss. R.....lb. .10½- —
tech., dms., c.l., divd. E. of Miss. R..lb. .07 - .09
W. of Miss. R.....lb. .08 - .10
l.c.l., divd. E. of Miss. R..lb. .07½- .09½
W. of Miss. R.....lb. .08½- .10½
tanks, divd. E. of Miss. R. lb. .06 - —
W. of Miss. R.....lb. .07 - —
Acetoacetate, dms., c.l., works, frt. alld..lb. .29½- —
Acetone, natural, group A producers, E. of Rockies, frt. alld., tanks..gal. .75 - —
dms., c.l., same basis.....gal. .81 - —
l.c.l., same basis...gal. .86 - —
Methyl acetone prices on Pacific Coast are 3c. per gal. higher on tanks and 4c. per gal. higher on drums, car lots.

Methyl acetone, natural, group B, producers, tanks, Zone 1..gal. .60 - —
Zone 2.....gal. .62 - —
Zone 3.....gal. .64 - —
Zone 4.....gal. .64½- —
dms., c.l., Zone 1.....gal. .65½- —
Zone 2.....gal. .67½- —
Zone 3.....gal. .69½- —
Zone 4.....gal. .71½- —
l.c.l., Zone 1.....gal. .68½- —
Zone 2.....gal. .85½- —
Zone 3.....gal. .72½- —
Zone 4.....gal. .85½- —
Natural methyl acetone sales zones are:—Zone 1, Conn., Del., D. of C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Penn., R. I., Tenn., Vt., Va., W. Va., Wis. Zone 2, Ala., Ark., Col., Fla., Ga., Kans., La., Miss., Neb., N. D., Okla., S. C., S. D., Tex., Wyo. Zone 3, Los A., San Fran., Seattle, Wash.; Portland, Ore. Zone 4, Ariz., Cal., Mont., Nev., N. Mex., Ore., Utah, Idaho, Wash.

Methyl acetone, synthetic tanks, Zone 1—gal. .43 - —
Zone 2.....gal. .44½- —
Zone 3.....gal. .45½- —
Zone 4.....gal. .45½- —
dms., c.l., Zone 1.....gal. .51 - —
Zone 2.....gal. .51 - —
Zone 3.....gal. .53½- —
Zone 4.....gal. .54½- —
l.c.l., Zone 1.....gal. .54½- —
Zone 2.....gal. .57 - —
Zone 3.....gal. .58 - —
Zone 4.....gal. .59 - —
Alcohol (see Methanol).
Anthranilate, 100 lbs lots....lb. 2.20 - —
25 lb. lots, bots.....lb. 2.35 - —
Benzoate, cns., 25 lbs.....lb. .70 - 1.00
Chloride, refrigeration, 500 lbs. and up, machine mfrs. and jobbers, cylinders..lb. .32 - —
service men and consumers, cyl..lb. .36 - —
60 to 490 lbs., cyl., mach. mfrs. and jobbers..lb. .36 - —
service men and consumers, cyl..lb. .40 - —
tanks, multi-unit, mach. mfrs. and jobbers..lb. .31 - —
service men and consumers..lb. .35 - —
Methyl chloride quotations are spot or contract, effective July 1, for delivery to any common carrier point in United States. Prices above are in 60, 90 and 180-lb. cylinders. Prices on the 20-lb. cylinders are uniformly 10c. per pound higher than above prices.
Methyl, cinnamate, bls.....lb. 1.50 - 4.00
Formate, dms.....lb. .89 - —
Lactate, dms., l.c.l., divd...lb. .70 - —
Iodide, bots.....lb. 4.00 - 4.15
Salicylate, dms.....lb. .35 - .37
cns. .....lb. .37 - .40
Molybdated violet toner. bbls.lb. .35 - —
Methylamyl ketone, dms., works, l.c.l..lb. .25 - —
smaller containers, same basis, lb. .28 - —
Methylcellulose, dms., 2,000 lbs. or more, works..lb. .50 - —
100 to 1,999 lbs., works...lb. .55 - —
1 to 99 lbs., works.....lb. .60 - —
Methylcyclohexane, 98-100%, dms., works..lb. .16 - —
Methylcyclohexanol, 98-100%, dms., works..lb. .28 - —
Methylcyclohexanone, 98 - 100%, dms., works..lb. .32 - —
Methylene blue, medcl., kgs., 100 lbs..lb. 2.00 - —
cns., 5 lbs.....lb. 2.35 - —
Chloride, dms., f.o.b. works..lb. .18 - .22
Methylethyl ketone, dms., c.l., frt. pd. E. of Rocky Mts., lb. .08½- —
l.c.l., same terms.....lb. .09 - —
tanks, same terms.....lb. .07½- —
Methylhexyl ketone, dms., tech., works..lb. .60 - —
Methylisobutyl ketone, dms., c.l., divd..lb. .12 - —
l.c.l., divd.....lb. .12½- —
tanks, divd.....lb. .11 - —
Methylnaphthyl ketone, dom., cryst., cns..lb. 3.00 - 3.10
Metronite pigment, 120 mesh, containers extra, c.l., f.o.b. Milwaukee..ton. 9.00 - —
l.c.l., same basis.....ton.11.00 - —
180 mesh, containers extra, c.l., same basis..ton.11.00 - —
l.c.l., same basis.....ton.13.00 - —
250 mesh, containers extra, c.l., same basis..ton.12.00 - —
l.c.l., same basis.....ton.14.00 - —
325 mesh, containers extra, c.l., same basis..ton.15.00 - —
l.c.l., same basis.....ton.17.00 - —
400 mesh, containers extra, c.l., same basis..ton.17.50 - —
l.c.l., same basis.....ton.19.50 - —
Mica, dry grd., amber, No. 1, quality, c.l..ton.30.00 - —
l.c.l., 5,000 lbs.....ton.40.00 - —
1,000 lbs.....lb. .02 - —
500 lbs.....lb. .02½- —
100 lbs.....lb. .03 - —
refined, c.l.....ton.20.00 - —
l.c.l., 5,000 lbs.....ton.30.00 - —
paint, c.l.....ton.55.00 - —
l.c.l., 3,000 lbs.....ton.65.00 - —



Like an Addition to Your Plant

Every inch of space, every pound of production, every piece of equipment should be carefully considered in the light of today's production demands and from the standpoint of the importance of production to the nation. If you are not already using Uversols for increased efficiency we believe it will be to your advantage to investigate them. Uversols are modern type driers developed to meet the needs of the paint and varnish industry. Their physical and chemical properties are designed to fit present day conditions.

UVERSOLS
(Naphthenate Type)

Uversol Cobalt Solid, 11.5%
Uversol Cobalt Liquid, 6%
Uversol Cobalt Lead, Solid, No. 330, 3% Co and 30% Pb
Uversol Cobalt Lead Liquid, No. 202, 2% Co and 20% Pb
Uversol Lead Solid, 40%
Uversol Lead Liquid, 32%, 24% and 16%
Uversol Lead Manganese Solid No. 303, 30% Pb and 3% Mn
Uversol Lead Manganese Liquid No. 220, 20% Pb and 2% Mn
Uversol Manganese Solid, 10.5%
Uversol Manganese Liquid, 6%
Uversol Zinc Solid, 16%
Uversol Zinc Liquid, 10% and 8%.

1. Uversols are uniform as to metal content, eliminating guesswork in formulation.

2. They are concentrated. Active metal content is greatly increased over old type driers. Concentration means less bulk—less storage space necessary—fewer containers—less shipping bulk—less handling.

3. Liquid Uversols can be added at any point during processing operations or just before packaging. Adjustments are easily made if necessary. Elimination of cooking or cutting driers frees stacks for additional production.

4. Uversols are soluble—do not separate from the vehicle and therefore maintain full efficiency.

THE HARSHAW CHEMICAL CO.
CLEVELAND, OHIO AND PRINCIPAL CITIES

RECEIVED NOV 3 1941 LIBRARY

ADVERTISEMENT—*This entire page is a paid advertisement.*

Prepared Monthly by U. S. Industrial Chemicals, Inc.

U.S.I. CHEMICAL NEWS

November ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1941

Moisture in Soil Quickly Estimated With Ethanol Test

Technique Speeds Analysis for Highway Construction Purposes

OKLAHOMA CITY, Okla.—The moisture content of soil—an important factor in its suitability for highway subgrade purposes—can be quickly determined by a technique involving the use of anhydrous ethanol.

A sample of the soil is mixed with ethanol and the mixture ignited and allowed to burn until the ethanol is exhausted. The process is repeated for three ignitions, and the sample is then placed in an oven for 5 minutes at 100° C. By comparing the weights of the original sample with that of the treated sample, the moisture content is found.

Tests indicate that determination can be made within 30 to 50 minutes, whereas previous methods required drying in an oven for 5 to 24 hours. Values for moisture content obtained by the ethanol technique were found to be, in most cases, within ± 0.5% of those obtained by oven drying.

Moisture content of the soil used as subgrade is an important factor in successful highway construction. Moisture determinations can be quickly made by an ethanol technique.

"DRY-ICE" Tells Real Jewels from Imitations

LONDON, England—Real diamonds and pearls can be distinguished from imitations by the simple process of touching them with a piece of solid carbon dioxide ("DRY-ICE"*), it has recently been discovered here. The genuine jewels emit a squeak or rattle, while an imitation gives forth no sound.

The mechanism of the test, it is explained, depends on the fact that "DRY-ICE" passes directly from the solid to the gaseous state at normal atmospheric pressure. When a pointed piece is presented to a conductor of heat, sufficient heat is conducted to the "DRY-ICE" to cause some of it to turn to gas, which issues in a stream from the point, as from a nozzle. The stream pushes away part of the object immediately in front of it, stopping the flow of heat, and with it the gas stream. The object then returns to contact with the "DRY-ICE," and the process is repeated several thousand times a second. The resultant vibrations produce a high-pitched sound. If a non-conductor of heat, such as glass, is touched with the "DRY-ICE," no sound is emitted.

* Pure Carbonic, Incorporated, sells "DRY-ICE" manufactured by U.S.I.

Ethanol and Related Chemicals Now Under Mandatory Priority

In order to assure the fulfilment of the constantly increasing needs of national defense, ethanol and related compounds have now been added to the already large number of chemical items on the Critical List. To conserve the supply of these chemicals, it has been found necessary to direct the distribution of ethanol (all grades and formulas), acetone, ethyl ether, ethyl acetate, butanol, and butyl acetate. Toward this end the Director of Priorities has issued General Preference Order M-30 dated August 28, 1941. Under this mandatory order it is necessary to give preference to defense orders, which subjects all non-defense shipments to unavoidable delays.

Because of this mandatory Priority Order, U.S.I. now finds it necessary to acknowledge all orders with the proviso that defense demands make it impossible to designate definite shipping dates.

Medical Analogy Suggests Way of Controlling Slime

BALTIMORE, Md.—The medical discovery that bacteria infecting the human body become accustomed, and therefore resistant, to prolonged exposure to one antiseptic, but succumb to a sudden attack by another antiseptic, has led to a novel application at U.S.I.'s plant.

It has been found that troublesome slime-forming microorganisms that tend to clog pipe lines and other equipment can be kept under better control if properly selected germicides are alternated. In this way the molds, after having become slowly acclimatized to one type of compound, become more sensitive to a second substance, which can be used in smaller quantities than would be necessary if the high sensitivity had not been developed by the application of the first antiseptic. By thus alternating antiseptics, the dosages of each can be reduced.

Finds Inert Pigments Add to Protective Value of Coatings

MANITOWOC, Wis.—A new approach to the problem of protecting metallic objects from corrosion, particularly at corners and edges, has been found in the use of a coating consisting of a phenol-formaldehyde resin, an inert pigment, and an organic solvent.

Coatings of this type, according to an inventor here who has received a patent on the process, give adequate protection to corners with only two coats of the finish. While the mechanism is not explained, the pigmented resin finishes apparently give much higher protection than unpigmented ones.

An important aspect of the invention is the use of a medium free from oil. A typical medium is described as consisting of:

	Per cent
Ethanol	50
Toluol	35
Butanol	10
Amyl acetate	5

Coatings are said to be suitable for protecting tanks, drums, pipes and ducts.

Formula for Solox Revised to Conform With Federal Order

U.S.I.'s Proprietary Solvent Now Uses Less Ethyl Acetate

Solox, U.S.I.'s popular general-purpose solvent, is now being produced in accordance with a revised formula to conform with a recent order of the Alcohol Tax Unit designed to conserve supplies of ethyl acetate.

The most important change made in the formulation of Solox in accordance with the new regulation is a decrease in the percentage of ethyl acetate employed. The new formula

The 5-gallon drum and 1-gallon can are among the popular containers for Solox, U.S.I.'s proprietary solvent now made under a new formula.

uses only 1 part of ethyl acetate for every 100 parts of S.D. Alcohol, as against 5 parts in the original formula. In most of the applications of Solox, this change will not affect its usefulness. In the cutting and thinning of shellac,

(*Continued on next page*)

Obtain High-Melting Wax By Acetone Fractionation

LOS ANGELES, Calif.—While the separation of wax-oil mixtures by means of acetone is a widely-known process in the petroleum industry, the application of acetone in the manufacture of high-melting waxes has been limited by the tendency of the wax to precipitate in the form of flakes. These flakes, in turn, formed a mass not easily washed free from adhering oil solution.

Flowing Stream of Acetone

This difficulty has now been overcome, according to inventors here, by spraying fine streams of molten wax into a flowing stream of acetone. The new process, on which a patent has been granted, is reported to precipitate the wax in the form of very small, free-filtering granules. The mixed stream of wax and acetone can be passed directly into a filter of suitable design, and the solvent can be easily drained off.

The acetone can be used together with benzol, if desired, but it is reported that acetone alone gives highly satisfactory yields of the high-melting waxes, with economical extraction costs.

ADVERTISEMENT—*This entire page is a paid advertisement.*

November ★ **U.S.I. CHEMICAL NEWS** ★ 1941

Uses Acid Components to Stabilize Zein Solutions

MERIDEN, Conn.—Greater industrial utility for zein and other prolamins is foreseen as a result of the discovery of a new method for preventing prolamin solutions from thickening or gelling on prolonged standing.

The method, described in a patent granted to an inventor here, makes use of a solvent mixture consisting of anhydrous or 190-proof ethanol and an organic acid. A typical solution consists of 10 parts of zein, 36 parts of 190-proof ethanol, and 4 parts of succinic acid. Other acids, such as lactic and tartaric, may also be used.

Solutions prepared in this way remain stable for considerable periods of time, the inventor claims, and in some instances are non-gelling for intervals of 3 to 6 months.

Vitality Vitamin Found To Be Pantothenic Acid

ATLANTIC CITY, N. J.—The mysterious "vitality vitamin," the absence of which in animal diets has been found to result in pronounced lack of vigor without any other signs of disease, has been identified as pantothenic acid, a member of the family of vitamins grouped as the Vitamin B complex.

A deficiency of pantothenic acid in experimental animals results in wasting away from lack of nourishment, it is indicated by recently reported tests. These studies emphasize the importance of pantothenic acid, which had previously been established as the vitamin necessary for the proper functioning of the adrenal glands, without which life would be impossible.

(Curbay B-G, a riboflavin concentrate developed by U.S.I. for use in mixed feeds, is very rich in pantothenic acid content.)

Revised Solox Formula

(*Continued from previous page*)

for example, the new formula will be at least as efficient as the old. In certain cases, however, where the solvent powers of Solox were due to its ethyl acetate content, some adjustments may be necessary when the new formula is used. When Solox is employed as a solvent for nitrocellulose and for certain resins, the lower content of ethyl acetate will result in some decrease in solvent powers, which may require slight changes in the manufacturer's formulations.

As in the past, Solox will be produced in both the regular and the anhydrous grades.

Makes Synthetic Spongy Materials from Ethylene

CLAYMONT, Del.—Ethylene is the raw material in novel synthetic spongy materials that can be used as thermal and acoustic insulation, and are free from the tendency to deterioration frequently encountered in other types of spongy materials.

This novel application of ethylene is described in a patent recently granted to an inventor here. The process consists in polymerizing ethylene under the influence of heat and pressure. The polymerization products, which are solid at room temperatures, are heated above their melting point in a pressure chamber, into which nitrogen is pumped. When the pressure is released and the molten mass cooled, the spongy material is formed.

One use suggested by the inventor for the new materials is in the manufacture of gloves suitable for handling "DRY-ICE."

Bread Quality Gets Boost From Extract of Egg Yolk

NEW YORK, N. Y.—A novel method of improving the texture and quality of bread by incorporating an ether extract of egg yolks has been revealed by two inventors here, who have obtained a patent on their process.

The egg extract is prepared, according to the patent papers, by mixing one part by volume of egg yolk with two parts of ethyl ether and one part of water. When the mixture is shaken and allowed to stand, it separates into layers from which the desired protein fraction can be recovered. The egg extractive can be incorporated in dough containing the usual ingredients.

Tells How to Make Varnish For Photographic Prints

NEW YORK, N. Y.—A varnish that increases brilliance and durability, and is especially suitable for use on bromide prints, is described as having the following proportions:

Borax	30 grains
Pale shellac	60 grains
Sodium carbonate	10 grains
Glycerin	30 minims
Water	1 ounce

This mixture is boiled and allowed to cool, and 1 ounce of ethanol is added. A small quantity of whiting or powdered pumice is added to precipitate the gum wax. The mixture is shaken at intervals and allowed to stand for several days, after which it is decanted and the clear liquid filtered.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

A water-clear coating is designed for application to aluminum and its alloys without anodizing or other primer treatment, it is reported. Protective value of the treatment has been demonstrated by a three-year test, it is said. **(No. 510)**

U S I

A tin coating can be applied to brass, copper, or steel by a new process which involves brushing on of a tin paste. Heat is applied to liquefy the paste, after which it is wiped with a cloth or pad to form a smooth coating. **(No. 511)**

U S I

A new adsorbent is described as consisting of hard, porous, stable white granules. It has been successfully employed, it is reported, in combined determinations of thiamin and riboflavin, but may also be used in the decolorization of oils, fats, and waxes by percolation means. **(No. 512)**

U S I

A synthetic wax, made from domestic raw materials, is recommended by the manufacturer as a flatting agent in paints, varnishes, and lacquers. It is said that the wax is compatible with many solvents, and that it can be employed also in the manufacture of paste polishes. **(No. 513)**

U S I

A new finish can be applied to steel, aluminum, and die castings, according to the maker, and may be used as a replacement for galvanizing in protecting metal surfaces against corrosion. The finish is said to be resistant to ethanol, alkalis, salt spray, and many chemicals. **(No. 514)**

U S I

Mildew-proofing of cotton and other fabrics can be accomplished by a new process which is said to be comparatively inexpensive and to use non-toxic chemicals. While the process is patented, it is announced that it can be employed without payment of a royalty. **(No. 515)**

U S I

A novel process for aiding the wetting of textile fibers makes use of a complex carrying agent and an absorbent, it is reported, and does not involve surface activities such as wetting agents. The absorbent is placed within the fibers and has high affinity for rewetting. **(No. 516)**

U S I

Permeability of fabrics to gases can be readily determined by new equipment utilizing the thermal conductivity method of gas analysis. Equipment is said to be adaptable to testing of balloon fabrics, gas masks, and coverings for life rafts, as well as for testing rubber, lacquers, and chemicals for impregnating fabrics. **(No. 517)**

U S I

A new soldering flux has sufficient strength to etch and clean metal surfaces prior to soldering without the necessity for any other cleaning operation, it is claimed. Flux is not injurious to the hands and does not give off strong fumes, according to the maker. **(No. 518)**

U S I

New photographic chemicals said to be of interest to both professional and amateur include a film cleaner which moistens the film while cleaning, thus helping to preserve it; and a high gloss solution which prevents scratching. **(No. 519)**

U.S.I. INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND ST., N.Y. USI SERVICE TO INDUSTRY BRANCHES IN ALL PRINCIPAL CITIES

A SUBSIDIARY OF U. S. INDUSTRIAL ALCOHOL CO.

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined
Methanol

Ethanol (Ethyl Alcohol)
Specially Denatured—All regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96%, Absolute
U.S.I. Denatured Alcohol
Anti-freeze
*Super Pyro Anti-freeze
*Solox Proprietary Solvent
*Solox D-I De-icing Fluid

***ANSOLS**
Ansol M
Ansol PR

ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Butyl Oxalate
Ethyl Oxalate

PHTHALIC ESTERS
Amyl Phthalate
Butyl Phthalate
Ethyl Phthalate
*Registered Trade Mark

PROPIONIC ESTERS
Amyl Propionate
Butyl Propionate

OTHER ESTERS
*Diatol
Ethyl Carbonate
Ethyl Chloroformate
Ethyl Formate
Ethyl Lactate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.

OTHER PRODUCTS
Acetone
*BK-5
Collodions
*Curbay B-G
*Curbay Binders
*Curbay X (Powder)
Derex
Ethylene
Ethylene Glycol
*Indalone
Methyl Acetone
Nitrocellulose Solutions
Potash, Agricultural
Urethan
*Vacatone

Mica, dry grd., white, No. 1 quality, c.l..ton.35.00 - —
l.c.l., 5,000 lbs.....ton.45.00 - —
1,000 lbs.....lb. .02½- —
500 lbs.....lb. .03 - —
roofing, c.l.....ton.29.00 - —
l.c.l., 5,000 lbs.....ton.39.00 - —
paint, c.l.....ton.60.00 - —
l.c.l., 5,000 lbs.....ton.70.00 - —
wet grd., paint or lacquer, c.l..lb. .04½- —
l.c.l. .....lb. .05 - —
paper, wall or coated, c.l..lb. .04⅝- —
l.c.l. .....lb. .04⅞- —
rubber, c.l.....lb. .04 - —
l.c.l. .....lb. .04½- —
biotite, c.l.....lb. .03½- —
l.c.l. .....lb. .04 - —

Mica, dry grd., is quoted in bags at the works; wet grd. mica in carload lots is frt. alld. E., and in less carload lots ex whse. or frt. alld. E. Prices of the wet grd. are ½c. per lb. higher west of Rockies.

Milk, powder, skimmed, roller, bbls., c.l..lb. .14 - —
l.c.l. .....lb. .15 - —
spray, bbls., c.l.....lb. .14 - —
l.c.l. .....lb. .15 - —
unskimmed, roller, bbls., c.l., lb. .27½- —
l.c.l. .....lb. .27⅝- .28
spray, bbls., c.l.....lb. .27½- —
l.c.l. .....lb. .27⅝- .28
Millet seed, yellow, bgs.....lb. .02½- .02⅝
early fortune, bgs.....lb. .0230- .0250
hulled, bgs.....lb. .06½- .06⅝
Mineral spirits (see Petroleum thinners and VM & P naphtha).
Molasses, blackstrap, tanks, f.o.b. No. Atlantic ports..gal. .12½- .13½
f.o.b. Gulf ports.....gal. .12 - .13
Molybdate orange (see Orange, molybdate).
Molybdenum metal, kgs., 99%, powd..lb. 2.60 - 3.00
Molybdenum, trioxide, pure, kgs., basis Mo. content, works..lb. .95 - —
technical, kgs., basis Mo. content, works..lb. .80 - —
Monoamylamine, dms., basis 100%, c.l., wks..lb. .50 - —
l.c.l., works.....lb. .53 - —
Monoamylnaphthalene, l.c.l., dms. works..lb. .17 - —
Monobutylamine, dms., basis 100%, c.l., wks..lb. .37 - —
l.c.l., works.....lb. .40 - —
Monoethanolamine, dms., c.l., works..lb. .24 - —
l.c.l., dms.....lb. .25 - —
tanks .....lb. .23 - —
Monoethylamine, basis 100%, dms., c.l., works..lb. .32 - —
l.c.l., works.....lb. .35 - —
Monochlorobenzene, dms., l.c.l. lb. .07 - —
smaller, cns.....lb. .08 - .09
Monoethylanilin, dms.....lb. .47 - —
Monomethylamine, dms., c.l., l.c.l., dlvd.....lb. .65 - —
Monomethylpara-aminophenol-sulphate, dms..lb. 3.75 - 4.00
Monosodiumphosphate (see Soda phosphate monobasic).
Morphine, bots., 5 ozs.....oz.11.10 - —
cns., 25 ozs.....oz.10.90 - —
Acetate, bots., 5 ozs.....oz. 9.00 - —
bots., 25 ozs.....oz. 8.80 - —
Ethylhydrochloride, bots., 5 ozs.. oz.10.75 - —
cns., 25 ozs.....oz.10.55 - —
Hydrobromide, bots., 5 ozs..oz. 8.95 - —
cns., 25 ozs.....oz. 8.75 - —
Hydrochloride, powd., 5-oz. bots. oz. 9.00 - —
25-oz. cans.....lb. 8.80 - —
Sulphate, bots., 5 ozs.....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —
Morpholine, dms., 55 gals., l.c., works..lb. .67 - —
smaller containers, works....lb. .75 - —
Mullein leaves, cans.....lb. .15 - .16
flowers, cns.....lb. 1.50 - 1.55
Musk, nat., Tonquin, grains, bots..oz.30.00 -35.50
synth., ambrette, cns., 100 lbs. or more..lb. 3.75 - —
5 lbs. to 75 lbs.....lb. 3.85 - —
1 lb.....lb. 4.20 - —
ketone, cns., 100 lbs. or more, lb. 3.90 - —
5 lbs. to 75 lbs.....lb. 4.00 - —
1 lb.....lb. 4.35 - —
xylol, cns., 100 lbs. or more, lb. 1.15 - —
5 lbs. to 75 lbs.....lb. 1.25 - —
1 lb.....lb. 1.55 - —
Musk root, bls.....lb. .50 - .60
Mustard seed, California, brown, lb. .16 - .16½
yellow, bgs.....lb. .12½- .13
Chinese, yellow, bgs.....lb. .07½- .08
Danish, yellow.....lb. .27 - .28
Montana, yellow, bgs.....lb. .07 - .07½
Roumanian, yellow.....lb. .14½- .15
Washington, yellow, bgs.....lb. .07¼- .07½
Myrobalans, J1, bgs., f.a.s...ton. No price
J2, bgs., f.a.s.....ton. No price
Extract, liquid, 25%, bbls....lb. No prices
solid, 50%, bbls.....lb. No prices
powdered, bbls.....lb. No prices

N

Naphtha, Painters (see Petroleum, naphtha, V. M. & P.).
Solvent (see S).
Naphthalene,[4] crude, dom., 74 deg., tanks, works...100 lbs. 2.50 - —
78 deg., tanks, works..100 lbs. 2.75 - —
Refined, balls or flakes, bbls., wholesalers and jobbers, f.o.b. works..lb. .08 - —
50-lb. cs., same basis....lb. .08¼- —
pkgs. (16 oz.), same basis..lb. .08½- —
(12 oz.), same basis....pkg. .07 - —
Nerolin, cryst., cns.....lb. 1.70 - 2.00
Nickel carbonate, bbls.....lb. .36 - .36½
Chloride, bbls.....lb. .18 - .20
Cyanide, 100 lbs., dms.....lb. 1.40 - —
25-lb. bot.....lb. 1.50 - —
Oxide, black, bbls.....lb. .35 - .38
Salt, bbls.....lb. .13 - .13½
Nicotine, sulphate, 40%, dms., works, frt. alld..lb. .703 - —
10-lb. tins.....lb. .86½- —
Niger seed, bgs.....lb. .15 - .16
Nitercake, bulk, works.....ton.16.00 - —
Nitrobenzene, dbl. dist., dms., c.l., lb. .06 - —
l.c.l. .....lb. .09 - —
tanks .....lb. .07 - —
Nitrocellulose, alcohol-soluble, ½, and 40 sec. vis., bbls., wks., lb. .28 - —
bronzing, 20, 40, 70 sec. vis., bbls., works..lb. .20 - —
ester, soluble, 30-35, ¼, ½ sec., bbls., c.l., dry weight, works..lb. .22 - —
l.c.l., ¼, ½ sec., bbls., dry weight, works..lb. .26 - —

Nitrocellulose, ester, soluble, 5-6, 15-20, 30-40, and 60-80 sec., bbls., c.l., dry weight, works..lb. .20 - —
l.c.l., 5-6, 15-20 sec., high vis., bbls., works..lb. .25 - —
Lacquer, 20-30 and 60-80 sec., vis., bbls., works..lb. .29 - —

Nitrocellulose prices are quoted on the basis of dry weight; denatured alcohol used in manufacture is charged extra. Barrels are to be paid for extra, but are returnable.

Nitroethane, l.c.l., dms., works, lb. .25 - —
Nitrogen solution, nitrogen basis, tanks, f.o.b. Atlantic and Gulf ports..unit-ton.1.2158- —
Nitrogenous fertilizer material, dom., 10% ammon., bulk, f. o. b. Carrollville, Wis., dlvd..unit-ton. 2.25 Nom.
f.o.b. Chemical, Ill..unit-ton. 2.25 Nom.
f.o.b. East Coast producing points..unit-ton. 2.75 - 3.00
import, bgs., c. i. f. Atlantic ports, shipt..unit-ton. No prices
Nitromethane, l.c.l., dms., works, lb. .25 - —
Nitronaphthalene, bbls.....lb. .24 - .26
Nitropropane I, l.c.l., dms., works, lb. .25 - —
II, same basis.....lb. .26 - —
Nutgalls, Aleppo, bgs., oz.....lb. .28 - —
Chinese .....lb. .30 Nom.
Extract (see Gall extract)
Nutmegs, E. I., 80s, bgs., cs..lb. .18 - .18½
110s, bgs., cs.....lb. .17 - .17½
small, grinding, bgs.....lb. .15 - .15½
West Indian, bgs.....lb. .14 - .14½
Nux Vomica, bls.....lb. .07 - .08
powd., bbls., bxs.....lb. .11 - .12

O

Oakbark extract, 25% tan., bbls., c.l., works..lb. .03½- —
l.c.l., bbls., works.....lb. .03¾- —
tanks .....lb. .06 - —
Ocher (see Yellow).
Octane, 100-140° C., industrial grade, dms., c.l., G. S. gal. .15 - —
l.c.l., G.S.....gal. .27 - —
10 gals., G.S.....gal. .55 - —
tanks, G.S.....gal. .12½- —
Octanol, normal, tech., 360-lb. dms., dlvd..lb. .85 - —
Oil, almond, bitter, artif. (see Benzaldehyde).
natural, U.S.P., bots.....lb. 3.50 - 3.75
sweet, true, exp., cns.....lb. 2.25 - 2.50
Amber, crude, cns.....lb. No stocks
ref'd, cns.....lb. No stocks
Amyris, cns.....lb. 3.75 - —
Angelica, root, bots.....lb. No stocks
seed, bots.....lb. 110.00- 120.00
Anilin (see A).
Oil, anise, USP, cns.. dms....lb. .95 - 1.00
Apricot, kernels, cns.....lb. .40 - .48
Avocado, cns., dms.....lb. 1.00 - 1.25
Bay, W. I., 50-55% phenols cns..lb. 1.25 - 1.50
55-66% phenols, cns.....lb. 1.35 - 1.60
Bergamot, artif., cns.....lb. 2.75 - 9.25
natural, coppers.....lb.22.00 - —
Birch (see Oil, sweet birch)
Birchtar, crude, cns.....lb. .90 - —
rect'fd., cns.....lb. 1.50 - —
Bois de Rose, Brazil, cns....lb. 4.00 - 4.25
Cade USP IX (see Oil Juniper tar).

Mica—Oil, Castor

Oil, cajeput, tech., dms.....lb. 1.15 - 1.20
USP IX, cns.....lb. 1.25 - 1.30
USP X, cns.....lb. 1.40 - 1.45
Calamus, cns.....lb. No stocks
Camphor, sassafrassy, cns...lb. .29 - .30
dms. .....lb. .27 - .29
white, cns.....lb. .32 - .33
dms. .....lb. .30 - .31
Cananga, native, cns.....lb.12.00 -12.50
rectified, cns.....lb.13.00 -13.50
Capsicum (oleoresin), USP VIII, cns..lb. 3.85 - 5.50
Caraway, USP, cns.....lb.14.00 -15.00
Cardamom, bots.....lb.25.50 -35.00
Cassia, SP, cns.....lb. 7.25 - 7.50
Castor, blown, one-way dms., c.l..lb. .14 - —
l.c.l. .....lb. .14¾- —
cold pressed, USP., bbls., c.l., lb. .12¾- —
l.c.l. .....lb. .13¼- —
cns. (1-gal.), l.c.l.....lb. .16½- —
cns. (5-gal.), l.c.l.....lb. .14½- —
dms. (returnable), c.l...lb. .12¼- —
l.c.l. .....lb. .13¼- —
tanks .....lb. .11¾- —
dehydrated, dms., c.l.....lb. .1690- —
l.c.l. .....lb. .1730- —
tanks .....lb. .16 - —
extracted No. 3, tech., bbls., c.l..lb. .12¼- —
l.c.l. .....lb. .13 - —
dms. (returnable), c.l.....lb. .12¼- —
l.c.l. .....lb. .13 - —
tanks .....lb. .11¼- —

New Charts...New Tables...New Graphs about SOLVENTS

—ALL in One Wall Chart
Data on Solvents, Diluents, and Plasticizers

FRONT

An encyclopedia of useful information—this new three-color wall chart—lists 26 properties of 83 commonly used solvents, diluents, and plasticizers. It contains new and heretofore unpublished data on the solubilities of important coating materials and their compatibility with various plasticizers.

BACK

Sixteen useful tables—viscosity conversion, humidity tables, drum calibration, and original data illustrating important principles of lacquer solvent formulation. This chart will be most helpful to the busy chemist. ***A request on your letterhead will bring you this wall chart.***

COMMERCIAL SOLVENTS Corporation
17 EAST 42nd STREET, NEW YORK, N. Y.

BUTANOL • BUTYL ACETATE • DIBUTYL PHTHALATE • NITROPARAFFINS • ETHYL ALCOHOL • ETHYL ACETATE

Oil, Castor—Oil, Tansy

Oil, castor, sulphonated, 50% (43% fat), dms., c.l. lb. .08¼- —
l.c.l. lb. .09¼- —
75% (63% fat), dms., c.l. lb. .11 - —
l.c.l. lb. .12 - —
80% (68% fat), dms., c.l. lb. .11½- —
l.c.l. lb. .12½- —
Cedarleaf, cs. lb. 1.03 - 1.38
dms. lb. 1.00 - 1.35
Cedarwood, Southern, cns. lb. .32 - .33
dms. lb. .30 - .31
Celery, bots. lb. 30.00 -35.00
Chaulmoogra, USP, cns. lb. .68 -
Chinawood, dms. lb. .36 Nom.
tanks lb. .34½ Nom.
Cinnamon, bark, bots. lb. 9.75 -32.00
leaf, dms. lb. 1.00 - 1.20
Citronella, Ceylon, cns. lb. 1.00 - 1.05
dms. lb. .95 - 1.00
Java, cns., dms. lb. .75 - .80
Clove, makers, USP, cns. lb. 1.35 - 1.40
dms. lb. 1.30 - .135
Coconut, Manila, crude, tanks, lb. .07⅝- —
edible, 76°, ret. dms., l.c.l. lb. .14¼- .14¾
Cod, Newf., dms. gal. .78 - .80
Codliver, med., U.S.P. bbl. 85.00 -90.00
Coriander, bots. lb. 26.00 -30.00
Corn, crude, tanks, works. lb. .11½- —
refd., bbls. lb. .14¾- .15
Cottonseed, cooking, bbls. lb. .16 - —
salad, bbls. lb. .16¼- —
Creosote (see C).
Croton, N.F., cns. lb. 2.40 - 3.00
Cubeb, USP, cns. lb. 8.50 - 8.75
Crude (see Petroleum, crude).
Cumin, bots. lb. 8.00 -12.00
Oil, cypress, bots. lb. 12.00 - —
Degras (see D).
Dill seed, bots. lb. 6.50 - 6.75
weed, bots. lb. 5.75 - 6.00
Dip (see D).
Erigeron, cns. lb. 2.25 - 2.35
Eucalyptus, cns. lb. .68 - .73
dms. lb. .65 - .70
Fennel, sweet, cns. lb. 2.50 - 2.75
Gaultheria (see Oil, wintergreen leaf).
Geranium, Algerian, rose, cns. lb. 16.00 -17.00
Bourbon, cns. lb. 16.00 -17.00
Turkish (see Palmarosa)
Grapefruit, cns. lb. 1.65 - 2.65
Grapeseed, dom., dms. lb. .35 - .36
imported, dms. lb. .20 - .25
Ginger, dist., bots. lb. 16.00 -20.00
-ssiac wood, concrete, bots. lb. 3.75 - 4.50
Halibut liver, ref., dms. gal. 70.00 Nom.
Hemlock, cns. lb. .93 - 1.15
Juniper, berry, cns. lb. 15.00 - —
wood, tech., cns. lb. No stocks
Juniper tar, USP XI, dms. lb. .72 - .95
Lard, common, 1, bbls. lb. .13 - —
2, bbls. lb. .12¾- —
extra, bbls. lb. .13¾- —
1, bbls. lb. .13¼- —
Winter, strained, bbls. lb. .14 - —
prime, burning, bbls. lb. .14¼- —
prime, ined., bbls. lb. .14¼- —
Laurel, bots. lb. 5.00 Nom.
Lavandin, cns., 25 lbs. lb. No stocks
Lavender flower, French, cns. lb. 7.75 11.25
garden, cns. lb. .55 - .70
spike, Spanish, tech., cns. lb. 2.70 - 3.00
dms. lb. 2.60 - 2.90
Oil, lemon, Calif., cns. lb. 3.25 - —
Messina, coppers, cns. lb. 5.50 - 6.50
Terpeneless, Type 1. lb. 16.75 -17.00
Type 2. lb. 8.50 -15.00
Uruguay, 10 kilo cans. lb. 5.50 - 5.75
Lemongrass, native, cns., dms., lb. 2.10 - 2.25
Lime, dist., cns. lb. 8.25 - 8.50
expressed, cns. lb. 12.50 Nom.
Terpeneless lb. 46.50 -78.00
Linalee, wood, cns. lb. 3.50 - 3.75
Linseed, raw, dms., c.l. lb. .1040- .1060
l.c.l., 10 to 69 lb. .1060- .1080
5 to 9 lb. .1100- .1120
less than 5 lb. .1120- .1140
tanks lb. .0950- .0970
boiled linseed oil .004 cent over raw.
Lovage, extra fine, bots. lb. 85.00 - —
Lubricating, at refinery, ex tax, California, neutrals, pale, 200-600 vis., 2½-4, tanks, gal. .07¼- .11
red, 200-900 vis., 4-6½ plus, tanks, gal. .07¼- .11¼
Group 3, bright stocks, 100-210 D, 0-25 pour, tanks, gal. .19¼- .24½
neutral, 150-400 vis., 3-3½, 0-10 pour, tanks, gal. .12¼- .17¾
200-280 vis., 3, 15-25 pour, tanks, gal. .12 - .14¼
Pennsylvania[2], bright stocks, S color, 140-150 vis., 10-25 pour, tanks, gal. .25 - .30½
cylinder oils, 600-630 flash, tanks, gal. .16 - .18½
600 - 650 steam ref'd, tanks, gal. .15 - .16¼
Oil, lubricating, at refinery, **neutral, 70° F., 3 color, 150 vis., 0-25 pour, tanks, gal.** .31 - .38½
200 vis., 0-25 pour, tanks, gal. .33 - .40½
Mace, dist., cns., dms. lb. 2.15 - 2.65
Mandarin, Brazilian, cns. lb. 8.00 - —
Italian, coppers. lb. 9.55 - —
Menhaden, crude, tanks, Balto. gal. .58 - —
ref'd alkali, dms. lb. .1220- —
kettle-bodied, dms. lb. .1320- —
light-pressed, dms. lb. .1120- —
tanks lb. .1000- —
Mineral, white (see Oil, white mineral).
Mustard, artif., USP, bots., cns., lb. 1.50 - 1.60
dist., natural, bots. lb. 9.50 -10.00
Neatsfoot, [5] 15° c.t., bbls. gal. 1.90 - —
20°, bbls. gal. 1.80 - —
30°, bbls. bal. 1.60 - —
extra, bbls. lb. .13½- —
1, bbls. lb. .13¼- —
prime, bbls. lb. .14 - —
pure, bbls. lb. .17¾- —
Neroli, bots. lb. 200.00 -375.00
Nutmeg, dist., cans, dms. lb. 2.15 - 2.65
Oiticica, liquid, dms. lb. .21¾- .22¼
tanks lb. .21 - .21½
Oleo, 1, bbls. lb. .12 - —
2, bbls. lb. .12¾- —
Olibanum, bots. lb. 5.00 - 5.25
Olive, denat., dms. gal. 4.00 - 4.15
edible, Calif., dms. gal. 4.85 - 5.00
imported, dms. gal. 5.35 - 5.50
foots, dms. lb. .17 - .17½
sulphonated, 50% (40% fat), dms., c.l. lb. No prices
l.c.l. lb. No prices
75% (63% fat), dms., c.l. lb. No prices
l.c.l. lb. No prices
80% (68% fat), dms., c.l. lb. No prices
l.c.l. lb. No prices
Orange, sweet, dist., cs. lb. 1.60 - —
expressed Calif., cns. lb. 3.00 - —
Argentine, 10-kilo cns. lb. 3.00 - 3.25
Brazilian, cns. lb. 2.85 - 3.10
Florida, cns. lb. 2.85 - 2.90
Messina, USP, coppers. lb. 8.00 Nom.
West Indies, cns. lb. 4.75 - 6.00
terpeneless lb. 35.00 -175.00
Origanum, cs. lb. 2.30 - 2.40
Palm, Niger, dms. lb. .08¾- —
Sumatra, tanks. lb. .07⅞- —
distant, ship't, bulk lb. .05¼- —
Palmarosa, cns. lb. 3.25 - 3.50
Paraffin, 320° flash, 60-70 vis., tanks, G. 3. gal. .05¼- —
350° flash, 70-80 vis., tanks, G. 3. gal. .05½- —
80-85 vis., bbls., extra, ind. refy. gal. .12 - —
100-105 vis., bbls., extra, ind. refy. gal. .14 - —
300° flash, 100-110 vis., tanks, G. 3. gal. .05¾- —
Patchouli, bots., cns. lb. 5.25 - 6.25
Peanut, crude, tanks, mill. lb. .11¾- —
refd., edible, bbls. lb. .15½- .15¾
Pennyroyal, dom., cns. lb. 2.50 - 2.65
import, cns. lb. 2.40 - 2.50
Peppermint, **natural, cns., dms** lb. 3.75 - 4.00
redist., USP, cns., dms. lb. 4.00 - 4.25
Perilla, dms. lb. .22½- .23
tanks lb. .21½- —
Petitgrain, Paraguay, cns. lb. 1.70 - 1.75
dms. lb. 1.65 - 1.70
Pimento berry, cns. lb. 4.25 - 8.50
leaf, cns. lb. 2.25 - 2.75
Pine, dest. dist., straw-color, dms., divd., E. ports. gal. .65 - —
steam-dist., dms. gal. .65 Nom.
Pineneedle, Siberian, cns. lb. 2.60 - 2.70
Putty, bbls., E. Segundo, Richmond, Cal. gal. .22¾- —
contracts gal. .19¼- —
Whiting, Ind. gal. .28 - —
dms., c.l., Boston, Providence, gal. .25 - —
l.c.l., same basis. gal. .27 - —
tanks, same basis. gal. .18 - —
Martinez, Cal. gal. .28 - —
Rapseed, tax incl., dms. lb. .14¾- .15
tax not incl., tanks. lb. .09½- —
blown, dms. lb. .17 - .17½
Red, dist., or saponif., dms., divd. lb. .12 - .13
tanks, divd. lb. .11¼- —
West coast prices one cent higher.
Rose, synth., bots. lb. 4.00 -60.00
natural, coppers. oz. 28.00 -30.00
Rosemary, Spanish, cns. lb. 1.25 - 1.30
dms. lb. 1.20 - 1.25
Rosin, 1st rectified, dms. gal. .48 - —
2d rectified, dms. gal. .50 - —
3d rectified, dms. gal. .54 - —
Rue, bots. lb. 7.25 - —
Sage, cns. lb. 2.10 - 2.20
Sandalwood, domestic, distilled, USP, cns. lb. 4.65 - 5.00
Mysore, cns., case lots. lb. 5.40 - 5.50
Sardine, crude, fut., tanks Pac. Cst—gal. .60 - —
refd., alkali, dms. lb. .1220- —
kettle-bodied, dms. lb. .1320- —
light-pressed, dms. lb. .1120- —
tanks lb. .1000- —
Sasafras, artif., cns. lb. .80 - 1.30
natural, dom., cns., dms. lb. 1.05 - 1.20
Savin, cns. lb. No stocks
Savory, cns. lb. No stocks
Seal, tanks. gal. .72 - —
Shark, tanks. gal. .71 - —
Shark liver, crude, dms million vitamin units. No prices
Shingle stains, bbls., c.l., works, gal 19 -
l.c.l., works. gal. .20 - —
tanks, works gal. 14 -
Snakeroot, Canada, cns. lb. 8.50 -10.00
Soybean, dom., crude, dms. lb. .11¾ Nom.
tanks lb. .11 Nom.
refd., dms. lb. .13 Nom.
tanks lb. .12½ Nom.
Spearmint, dms. lb. 2.55 - 2.80
Sperm[6], bleach, 38°, dms. lb. .1270- —
43°, dms. lb. .1200- —
natural, dms. lb. .1150- —
Spruce, cns., dms. lb. .93 - 1.15
Sweet, birch, North, cns. lb. 3.00 - 4.00
South, cns. lb. 2.25 - 2.50
Tall crude, dms., c.l., works, ton. 40.00 - —
l.c.l., works. ton. 45.00 -50.00
tanks, works. ton. 30.00 - —
distilled, dms., c.l., divd. lb. .05½- .07
l.c.l., divd. lb. .06½- .08¼
tanks, divd. lb. .05 - .06¾
refined, dms., c.l., works. lb. .04 - —
l.c.l., works. lb. .04¼- —
tanks, works. lb. .03¾- —
Tallow, acidless, bbls. lb. .13 - —
tanks lb. .12½- —
Tansy, cns. lb. 3.55 - 4.25

New Synthetic Gum Jellies with COLLORESIN

A Water Soluble Methyl Cellulose

Dimethyl Ether of Cellulose, a white fibrous solid which dissolves in water.

Resistant to the action of alkalies and dilute acids giving a clear colorless solution.

Colloresin is of interest to the manufacturer of cosmetics and pharmaceuticals as a replacement for natural gums and in the manufacture of Liquid Dentifrices, Tooth Pastes, Creams, Soapless Shampoos, Hair Grooms, Wave Sets, Brushless Shaving Creams, etc.

Tentative formulas for the above are available as well as instructions as to methods of its employment.

Available in seven viscosities.

GL 4C

Non Toxic Emulsifying, Detergent, Foaming, Wetting Agent

A protein-amino acid condensate exceptionally fine for Liquid Dentifrices, Soapless Shampoos, Brushless Shaving Creams, etc.

GL 4C may be readily used with Colloresin in the manufacture of these products.

Requests for samples on your firm's letterhead will be promptly answered.

Aromatics Division
GENERAL DRUG COMPANY
644 PACIFIC STREET, BROOKLYN, N. Y.
9 SOUTH CLINTON STREET, CHICAGO TRANSPORTATION BUILDING, LOS ANGELES
1019 ELLIOTT STREET, W., WINDSOR, ONT.

Oil, tar, pine, com'l, dms., c.l., dlvd. E. cities..gal. .28 - —
E. ports, c.l.....gal. .27½- —
l.c.l. .....gal. .31 - —
tanks, dlvd. E. cities..gal. .21 - —
rectfd., USP, bbls., l.c.l., dlvd. E. ports..gal. .55 - —
Tar acid (see T).
Teaseed, crude, dms.....lb. .28 - —
refined, dms.....lb. .30 - —
Tea tree (see Oil, Ti tree).
Thyme, NF, red, cns.....lb. 1.85 - 2.20
white, cns.....lb. 1.95 - 2.35
Tung (see Oil, Chinawood).
Ti tree, cns.....lb. 2.50 - 2.65
Turkey red (see castor, sulphonated).
Turpentine (see T).
Turtle, cns.....gal. 8.50 - —
Vetiver, Java, bots.....lb.17.50 -18.00
Whale, ref., natural, dms...lb. .1070- —
winter, bleach, dms.....lb. .1110- —
Wheat germ, cns., dms...gal.17.50 -25.00
White, mineral, dom., tech., 50-60 vis., dms..gal. .41 - .49
65-75 vis., dms.....gal. .42 - .50
80-90 vis., dms.....gal. .43 - .52
USP, 80-90 vis., dms.....gal. .45 - .54
95-105 vis., dms.....gal. .50½- .59½
125-135 vis., dms.....gal. .56 - .63
140-150 vis., dms.....gal. .58 - .69
175-185 vis., dms.....gal. .61½- .70½
200-210 vis., dms.....gal. .64½- .73½
320-330 vis., dms.....gal. .72 - .81
335-345 vis., dms.....gal. .73 - .82
Russian, 80-90 vis., dms..gal. No prices
145-155 vis., dms.....gal. No prices
175-185 vis., dms.....gal. No prices
335-345 vis., dms.....gal. No prices
Wintergreen, natural, North, cns..lb. 4.75 - 6.00
South, cns.....lb. 3.50 - 3.85
synth (see Methyl salicylate).
Wood (see Oil, chinawood).
Wormseed, cns.....lb. 2.50 - 4.00
Wormwood, cns.....lb. 4.50 - 5.00
Ylang-ylang, Bourb., bots., cns lb.20.00 -24.00
Manila, bots.....lb.35.00 -40.00
Olivine, aggregate c.l. mines, ton. 7.00 -11.00
Lumps, same basis.....ton. 7.00 - —
Spalls, same basis.....ton. 5.00 - —
crushed, 8 mesh, bulk, c.l., works..ton. 8.00 - —
paper bags, c.l., wks..ton. 9.50 - —
ground, 325 mesh, c.l., mines.. ton.20.00 - —
200 mesh, c.l., mines....ton.17.00 - —
100 mesh, c.l., mines....ton.15.00 - —
20 mesh to dust.....ton.12.00 - —
Opium, gum, USP, 50-lb. lots, cns..lb.11.50 - —
25-lb. lots, cns.....lb.11.75 - —
5-lb. lots, cns.....lb.12.00 - —
1-lb. lots, cns.....lb.12.15 - —
Prices on powd. and gran. USP opium are $1 per pound higher.
Orange, Lake, Persian, bbls...lb. .39 - .45
Mineral, Amer., bbls., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex., and W. of Cascade Mts. in Ore. and Wash..lb. .11½- —
Mineral, Amer., bbls., 5 tons, dlvd., Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore., Wash..lb. .11½- —
Colo., Mont., N. M., Wyo .lb. .11¾- —
5 bbls., dlvd., other points, lb. .11½- —
smaller lots, dlvd., Ala., etc..lb. .12 - —
Ariz., etc.....lb. .12½- —
Colo., Mont., N. M., Wyo..lb. .12½- —
Other points.....lb. .11¾- —
French, Tours, casks, ex dock, lb. No prices
kgs., ex dock.....lb. No prices
Molybdate, bbls.....lb. .31 - —
Toner, bbls.....lb. .80 - —
Orangeflower petals, cs.....lb. .45 - .50
Orange peel, bitter, bls.....lb. .32 - .33
sweet, bls.....lb. .11 - .17
Haitain, bgs.....lb. .10 - .12
Orris root, Florentine, bgs....lb. 2.25 Nom.
fingers, cs .....lb. No stocks
powd., bbls., bxs.....lb. 2.50 Nom.
Verona, bls.....lb. 2.00 Nom.
powd., bgs cns .....lb. 2.25 Nom.
Orthoamylphenol, l.c.l., dms., works..lb. .25 - —
Orthoanisidin, bbls.....lb. .40 - —
Orthochloraniline, dms.....lb. .60 - .70
Orthochlorophenol, dms .....lb. .37 - —
Orthocresol, dms., c.l., works..lb. .17 - .17½
l.c.l., same basis.....lb. .17½- .18
Orthodichlorobenzene, dms., c.l., works, frt. alld. E. of Rockies..lb. .06 - .07
l.c.l., same basis.....lb. .07 - .08
100-lb. tins, same basis.lb. .08 - .09
50-lb. tins, same basis..lb. .09 - .10
tanks, same basis.....lb. .05½- .06½
Orthodichlorobenzene prices west of Rockies 1c. per lb. higher.
Orthonitroaniln, dms.....lb. .55 - —
Orthonitrochlorobenzene, dms..lb. .15 - .18
Orthonitroparachlorophenol,cns.lb. .75 - —
Orthonitrotoluene, dms.....lb. .09 - —
Orthophenetidin, dms.....lb. .80 - —
Orthotoluidin, dms.....lb. .10 - —
Osage orange, crystals, bgs....lb. .23 - —
extract, bbls., No. 1.....lb. .11 - —
No. 2...lb. .10 - —
Oxyquinolin sulphate, cns.. 100-lbs., works..lb. 3.50 - —
bots., cns., 1-50 lbs.....lb. 3.75 - 4.15

P

Papain, powd., cs.....lb. 3.00 - 3.25
Paprika, Algerian, bgs.....lb. .32½- .33
Bulgarian, bxs.....lb. .26 - .29
Portuguese, extra fancy, bgs.lb. .35½- .36
good, bgs.....lb. .30 - .31
Spanish, extra fancy, cs....lb. .42 - .42½
medium, cs.....lb. .36 - .37
Parachlorophenol, dms.....lb. .32 - —
Paracymene, refd., dms.....gal. .75 - 1.25
Paradichlorobenzene, dms., c.l.lb. .11 - .12
l.c.l. .....lb. .12½- .13½
Paraffin, crude, scale, white, 122-124 A.m.p., bgs., c.l., Okla refy..lb. .06¼ Nom
bbls., c.l., N. Y.....lb. .06¼ Nom.
124-126 A.m.p., bgs., c.l., Okla., refy..lb. .06¼ Nom.
bbls., c.l., N.Y.....lb. .06¼ Nom.
yellow, 124-126 A.m.p., bbls., c.l., N.Y..lb. .06 Nom
Paraffin, fully refd., 123-125 A.m.p., bgs., c.l..lb. .06 Nom.
125-127 A.m.p., bgs., c.l. lb. .06 Nom.
128-130 A.m.p., bgs., c.l. lb. .06 Nom.
131-133 A.m.p., bgs., c.l. lb. .06¼ Nom.
133-135 A.m.p., bgs., c.l. lb. .0655 Nom.
135-137 A.m.p., bgs., c.l. lb. .0680 Nom.
138-140 A.m.p., bgs., c.l. lb. .0755 Nom.
143-145 A.m.p., bgs., c.l. lb. No prices
151-153 A.m.p., bgs., c.l. lb. No prices

Refined paraffin, loose, is 40 points below the above in each case. Prices are for contract delivery.

match, A.m.p., up to and incl. 110-112 bbls., c.l..lb. .05½- —
Semi-refd., solid. 122-124 A.m.p., bgs..lb. .06 Nom.
Paraformaldehyde,[3,5,6] dms., 1,000 lbs. or more, shipments, f.o.b. Perth Amboy, Philadelphia, or N.Y.C..lb. .23 - —
100 to 999 lbs., shipments, same basis..lb. .24 - —
Paraldehyde, tech., 98%, 55 and 110-gal. dms., l.c.l., works..lb. .12 - —
5 and 10-gal. dms., works..lb. .15 - —
USP, cs., cbys.....lb. .37 - .45
Paranitrophenol, kgs.....lb. .35 - —
Paranisidine, dms.....lb. .75 - —
Paranitroanilin, kgs., works...lb. .45 - —
Paranitrochlorobenzene, kgs...lb. .15 - —
Paranitrotoluene, kgs.....lb. .30 - —
Paraphenylenediamine, bbls....lb. 1.25 - 1.30
Paratoluenesulphonamide, bbls.lb. .70 - —
Paratoluidin, bbls.....lb. .48 - —
Pareira brava root, bls.....lb. .20 - .21
Paris green, dealer, dms., kegs, c.l., f.o.b. wks., frt. alld..lb. .24 - .26
l.c.l., same basis.....lb. .25 - .27
Passion flower, herb, bls.....lb. .06 - .07
Patchouli leaves, bls.....lb. .28 - .30
Pellitory root, bls.....lb. .30 - .32
Pennyroyal leaves, bls.....lb. .15 - .16
Pentachlorophenol, dms., works lb. .20 - .25
Pentaerythritol, C.P., bbls., dlvd. lb. .75 - —
less than barrel lot.....lb. 1.00 - —
tech., bbls., dlvd.....lb. .33½- .35½
less than barrel lots.....lb. .40 - —
Pentaerythritol tetra acetate, bbls., dlvd..lb. 1.00 - —
less than barrel lot.....lb. 1.50 - —
Pentanes, 28°-38° C., industrial grade, dms., c.l., G.S, gal. .11 - —
l.c.l., G.S.....gal. .19 - —
tanks, G.S.....gal. .08½- —
laboratory grade, dms., c.l., Pepper, black, Alleppy, bags...lb. .08¾- .09¼
Lampong, bgs.....lb. .06 - .06¼
Tellicherry, bags.....lb. .08½- .09
white, Java, Muntok, bags...lb. .09½- .10
Singapore, Muntok, bg.....lb. .09¼- .09¾
Muntok, small berry, bgs..lb. .08¾- .09¼
red, chillies, Japan, flontaka.lb. .25½- .26
Mombassa, bgs.....lb. .22½- .23
Sierra Leone, bgs.....lb. .24 - .24½
Peppermint leaves, dom., bls..lb. .65 - .70
import, bls.....lb. 1.25 Nom.
Perchlorethylene, dms., c.l., works, frt. alld., zone 1..lb. .03 - —
l.c.l., same basis.....lb. .03½- —
Zone 2, dms., c.l., works, frt. alld..bl. .03½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, dms., c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock points..lb. .09 - —
l.c.l., same basis.....lb. .09½- —

All prices on perchlorethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following states.—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., N. H., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City; N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla., and Fla. Zone 3 includes Colo., N. M., Wyo., Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Idaho, Ore., Nev., Wash., Utah and Cal.

Peru, balsam, dms.....lb. 1.35 - 1.40
Petrolatum, amber, dms.....lb. .03½- —
l.c.l. .....lb. .04½- —
amber, extra, dms.....lb. .03¾- —
l.c.l. .....lb. .04¾- —
white, cream, dms., c.l.....lb. .05 - —
l.c.l. .....lb. .06½- —
lily, dms., c.l.....lb. .05¾- —
l.c.l. .....lb. .07¼- —
snow, dms., c.l.....lb. .06½- —
l.c.l. .....lb. .08 - —
Petroleum, crude, bulk, at wells:—
California .....bbl. .43 - 1.71
Canada .....bbl. 1.08 - 1.70
Central West:—
Illinois .....bbl. 1.37 - —
Ohio .....bbl. 1.05 - 1.10
Michigan .....bbl. 1.17 - 1.44
Indiana .....bbl. 1.22 - —
East Texas.....bbl. 1.25 - —
Gulf Coast .....bbl. 1.06 - 1.48
Kentucky, Tennessee.....bbl. 1.22 - 1.42
Louisiana, Arkansas.....bbl. .94 - 1.86
Mexico .....bbl. No prices
Midcontinent (Oklahoma, Kansas, North Texas).....bbl. .75 - 1.25
Pennsylvania, Ohio, West Virginia:—
Bradford, Allegany....bbl. 2.75 - —
Corning .....bbl. 1.81 - —
N. Y. Transit lines....bbl. 2.75 - —
Eureka lines.....bbl. 2.34 - —
S. W. Penn lines.....bbl. 2.40 - —
Lower district in National Transit lines..bbl. 2.63 - 2.63
Rocky Mountains.....bbl. .96 - 1.20
South Central and Southwestern Texas..bbl. 1.03 - 1.50
Texas Panhandle, W. Texas and N. Mexico.....bbl. .70 - 1.37
Ether, laboratory grade, 30-60°C, c.l..gal. .16 - —
l.c.l. .....gal. .27 - —
10 gals.....gal. .55 - —
35-60°C., l.c.l.....gal .27 - —
10 gals.....gal. .55 - —
40-75°C., c.l.....gal. .16 - —
l.c.l. .....gal. .27 - —
10 gals.....gal. .55 - —

Petroleum ether prices are spot quotations f.o.b. Group 3, for material packed in drums.

Petroleum, lacquer, diluent, at refinery:—
California, 100 l.b.n., 200 e.p., tanks, dlvd., Los Angeles..gal. .11 - —
San Francisco..gal. .11½- —
Willbridge, Ore., Fort Wellea, Wash..gal. .12 - —
East Coast, N. Y., tanks, gal. .11 - —
N. J., tanks.....gal. .11 - —
Group 3, toluol type, tanks, gal. .07⅝- .08⅛
Bensol type, tanks..gal. .07⅝- .08⅛
Mineral spirits at refinery, California (f.o.b. San Francisco), 166-232 b.r., tanks, gal. .10½- —
198-290 b.r., tanks...gal. .10½- —
245-397 b.r., tanks...gal. .10¾- —
312-408 b.r., tanks...gal. .09 - —
362-458 b.r., tanks...gal. .09 - —
East Coast, N. Y., tanks, gal. .09½- —
N. J., tanks.....gal. .09½- —
Group 3, tanks.....gal. .06¼- —
Gulf Coast, tanks.....gal. .06½- —
tankwagon:—
Albany .....gal. .13¼- —
Baltimore (100 gals.)..gal. 14 - —
25-99 gals.....gal. 18 - —
Boston .....gal. .11½- —
Bound Brook, North Amboy, N. J..gal. .13¼- —
Bridgeport, Conn.....gal. .11¼- —
Buffalo .....gal. .13½- —
Camden, N. J.....gal. .10 - 11½
Chicago .....gal. .1470- —
Decatur .....gal. .1810- —
Des Moines.....gal. .1780- —
Evansville, Ind.....gal .1420- .16[9]
Milwaukee .....gal. .1980- —
Minneapolis-St. Paul, gal. .19[0]- —
Newark .....gal. .09½- —
New York (200 gal.)..gal. .10½- —
Omaha .....gal. .12½- —
Pittsburgh .....gal. .11¼- .13½
Providence .....gal. .12 - —
Rochester .....gal. .12½- —
St. Louis.....gal. .1470- —
Syracuse .....gal. .10½- —
Trenton .....gal. .10½- —
Wilmington, Del.....gal. .12½- —
Naphtha, cleaners, at refinery:—
California (f.o.b. San Francisco), tanks..gal. .12 - —
East Coast, N. Y., tanks, gal. .10½- —
N. J., tanks.....gal. .10½- —
Group 3, tanks.....gal. .07¼- —
Tankwagon, Boston, ex tax, gal. .12½- —
Bridgeport .....gal. .13½- —
Chicago, inc. 4c. tax..gal. .18 - —
Decatur, inc. 4c. tax..gal. .1910- —
Des Moines, inc. 4c. tax, gal. .1890- —
Evansville, inc. ex tax.gal. .15 - .16
Milwaukee, inc. 5c. tax.gal. .2030- —
Minneapolis-St. Paul, inc. 5c. tax..gal. .20½- —
Newark, ex tax.....gal. .10½- —
New York, ex tax....gal. .11½- —
Omaha, ex tax .....gal. .1490- .1590
Philadelphia ex tax...gal. .13 - —
St. Louis, inc. 1c. tax..gal. .1570- —
Solvent, rubber, at refinery, California (f.o.b. San Francisco), gal. .24 - —
East Coast, N. Y., tanks, gal. .10½- —
N. J., tanks.....gal. .10½- —
Group 3, tanks.....gal. .07¼- —
Stoddard (CS 8-33), at refinery:—
California (f.o.b. San Francisco), tanks..gal. .11 - —
East Coast, N. Y., tanks, gal .09½- —
N. J., tanks.....gal. .09½- —
Group 3, tanks.....gal. .06¾- —
Tankwagon, Boston, ex tax gal. .11½- —
Chicago, inc. 4c. tax..gal. .1640- —
Decatur, inc. 4c. tax..gal. .1860- —
Des Moines, inc. 4c. tax, gal. .1840- —
Evansville, Ind., ex tax, gal. .14 - .15
Milwaukee, inc. 5c. tax.. gal. .1980- —
Minneapolis-St. Paul, inc. 5c. tax..gal. .1820- —
Newark, ex tax.....gal. .09½- —
New Orleans, ex tax..gal. .11 - —
New York, ex tax.....gal. .10½- —
Omaha .....gal. .1360- 1450
Philadelphia, ex tax...gal. .13 - —
St. Louis, inc. 1c. tax..gal. .1340- —
Tulsa, ex tax.....gal. .10½- 11¼

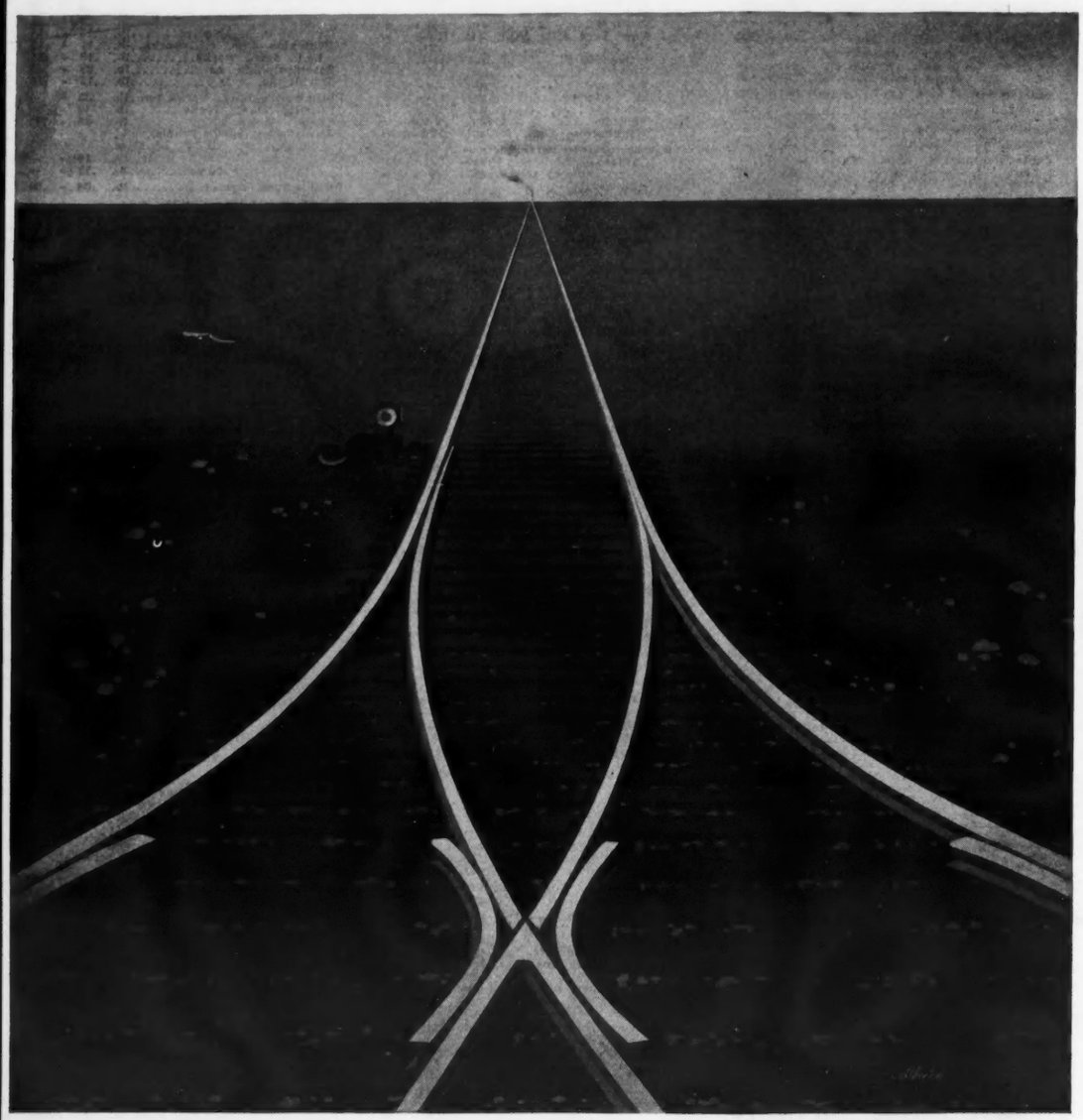
Phenobarbital, 5-lb. bots.....lb. 4.35 - —
bots. or cns., 100 lbs., spot or contract..lb. 4.00 - —
25-lb. cns.....lb. 4.25 - —
Phenol,[8] USP, dms., c.l., works, frt. equald..lb. .12½- .13
l.c.l., same basis.....lb. .13¼- .13¾
under 1,000 lbs.....lb. .14¼- .14¾
tanks, works.....lb. .11½- .12
Phenolphthalein, USP, bbls., dms 2,000-lb. lots..lb. .85 - —
bbls., dms., kegs, 100-250 lbs., lb .87 - .89
yellow, fib. dms., 2,000-lb. lots, lb. .80 - —
100-lb. fib. dms.....lb. .82 - —
25-lb. dms.....lb. .87 - —
50-lb. kgs.....lb. .84 - —
Phenyl chloride, dms.....lb. .17 - —
Phenylacetaldehyde, bots.....lb. 5.00 - 6.00
dimethylacetate, cns.....lb.14.50 -15.00
Phenyl ethyl acetate, cns.....lb. 2.90 - 3.50
Phenylethylphenyl acetate, bots. lb. 8.00 -15.00
Phenylhydrazine, base, CP, bots. lb. 4.55 - —
hydrochloride, CP, bots., works. lb. 7.10 - —
commercial, kgs., works.....lb. 1.75 - —
Phloroglucinol, CP, tins, wks..lb.20.00 -22.00
tech., tins, works.....lb.15.00 -16.50
Phosphate rock, Fla., high-grade, hard, 76% min..long ton. 5.00 - —
land-pebble, 68% min.long ton. 2.00 - —
70% min.....long ton. 2.30 - 2.40
72% min.....long ton. 2.75 - 3.00
74% min.....long ton. 4.00 - —
Tenn., 72% min.....long ton. 5.00 - —
75% min.....long ton. 6.00 - —
Phosphate rock prices are for shipment in bulk, f.o.b. mines.
Phosphorus, red, cs.....lb. .40 - .44
yellow, dms.....lb. .18 - .20
cases .....lb. .23 - .25
Oxychloride,[3] cyls.....lb. .15 - .18
Pentoxide, dms., c.l., works..lb. .11 - .13
l.c.l., dms., works.....lb. .13 - .14
Sesquisulphide, cs.....lb. .38 - .42
Trichloride, cyls.....lb. .13 - .16
Phthalamide, bbls., works, ton..lb. .35 - —
single, bbls., works.... ..lb. .40 - —
kgs., works.....lb. .45 - .50
Phthalic anhydride,[6] bbls., c.l., works, frt. all. E. of Miss. R..lb. .14½- —
l.c.l., same basis.....lb. .15½- —
Pichi leaves, bgs.....lb. .08 - .09
Pilocarpine hydrochloride, bots., vis..oz. 3.25 - 3.75
Nitrate, bots., vis.....oz. 3.25 - 3.75
Pimento, Jamaica, bgs.....lb. .19½- .20
Mexican (see Allspice, Mexican).
Pinkroot, bls.....lb. .42 - .45
Pitch, burgundy (see B).
Coaltar, 160° m.p., bbls., c.l., works..ton.19.00 - —
l.c.l. .....ton.22.00 - —
hardwood, 1-time dms., c.l., dlvd. Akron..ton.23.75 -24.00
Linseed, dms.....lb. .05 - .05½
Petroleum (see Asphaltum, Mexican, Texas).
Pitch, pine, bbls.....bbl. 6.75 - 7.00
Plaster of Paris (see Gypsum).
Pleurisy root, Southern, bls....lb. .12 - .13
Podophyllin, dms., 100-lb. lots, dlvd. E. of Miss..lb. 7.65 - —
Poke root, bls.....lb. .09 - .10
Polyamyl naphthalene, l.c.l., dms., works..lb. .25 - —
Pomegranate bark, bgs.....lb. .49 - .50
Root bark, bgs.....lb. .60 - .65
Poppy flowers, red, bls.....lb. .70 - .75
Seed, Dutch, bgs.....lb. .46 - .48
Indian, white, bgs.....lb. .09 - .09½
Turkish, bgs.....lb. .34¾- .35¼
Potash abietate.....lb. .08 - —
Acetate, USP, bbls., 250 lbs..lb. .28 - —
cns., 25 lbs.....lb. .31 - .44
Arsenite, USP, solut., 100-lb. lots, cbys., demijs..lb. .13 - .15
Bicarbonate, USP, cryst., bbls., 300 lbs. .14 - —
gran., bbls., 250 lbs.....lb. .14 - —
Bichromate,[3,5] spots, c.l., works..lb. .09¾- —
6 casks or 10 bbls., or over, works..lb. .09¾- —
5 casks or 9 bbls., or less, works..lb. .10 - —
Bromide, USP, gran., bbls., 500 lbs..lb. .27 - .31
kgs., 100 lbs.....lb. .28 - .32
Carbonate, calc., dms., c.l., works..lb. .06½- —
l.c.l., same basis.....lb. .06¾- —
hydrated, 83-85%, bbls., c.l., works..lb. 05½- —
l.c.l., same basis.....lb. .05¾- —
liquid, dms., c.l., works, frt. alld..lb. .03 - —
l.c.l., dms., same basis..lb. .03½- —
tanks, same basis.....lb. .02¾- —
USP, gran., bbls., 325 lbs. lb. .14 - .16
powd., bbls., 325 lbs.....lb. .19 - —
kgs., 100 lbs.....lb. .21 - —
Caustic, flake, 88-92%, dom., c.l., works..lb. .07 - —
l.c.l., works.....lb. .07¼- —
liquid, 45% basis, dms.....lb. .03½- .03¼
tanks .....lb. .02½- —
solid, 88-92%, dom., dms., c.l., works..lb .06¼- —
l.c.l. .....lb. .06½- .06¾
Chlorate,[3] cryst., kgs.....lb. .11 Nom.
powd., kgs.....lb. .09¾- .10
Chloride, tech., 98%, cryst., bgs., kgs..lb. .08 Nom.
Chromate,[3,5] kgs.....lb. .24 - .27
Citrate, USP, gran., 250-lb. bbls., lbs..lb. .33½- —
100-lb. dms.....lb. .34½- —
50-lb. dms.....lb. .35½- —
25-lb. dms.....lb. .37½- —
powd., 3c. per lb. higher.
Cyanide, dom., dms., works..lb. .55 - —
Cyanide, gold, 41% gold, bots., works..oz.14.20 -14.95
Glycerophosphate, 75%, sol., dms., 1,000-lb. lots..lb. 1.50 - —
100-lb. lots.....lb. 1.60 - —
50-lb. lots, cbys. or cns.lb. 1.65 - —
25-lb. lots, cns.....lb. 1.75 - —
Guaiacolsulphonate, fib. dms., 100-lb. lots..lb. 1.75 - —
25 lbs. to 50 lbs.....lb. 1.80 - 1.85
Hydroxide, USP, sticks, cns., 100 lbs. to 1,000 lbs..lb. .32 - .34
Hypophosphite, cns., 100 lbs..lb. .72 - —
25 to 50 lbs.....lb. .75 - —
Iodate, bots., 5 lbs.....lb. 3.46 - —
cns., 25 lbs.....lb. 3.35 - —
Iodide, bots or cns.....lb. 1.44 - 1.48
dms. .....lb. 1.35 - 1.38
Kainit, 20% K_2O, bulk, ex vessel, Atlantic or Gulf ports .ton. No prices

Potash, Manure Salt—Red, Litho

Potash, manure salt, dom., run-of-mine grade, bulk, ex vessel, ports..unit-ton. .60 - —
f.o.b. Carlsbad, N.M.unit-ton. .20 - .21
import, 50% K_2O, bulk, ex vessel, Atlantic or Gulf ports..ton. No prices
Metabisulphite, kgs.....lb. .18 - .26
Muriate, dom., min. 50% K_2O, bulk, ex vessel, ports.. unit-ton. .56 - .58
min. 60% K_2O, same basis.. unit-ton. .53½- —
import, min. 50% or 60% K_2O, bulk, ex vessel, Atlantic or Gulf ports..unit-ton. No prices
Domestic muriate of potash prices, basis f.o.b. Carlsbad, N. M., are 11.2c. per unit of K_2O less than the ex vessel price named above.
Oxalate, pure, cryst., kgs....lb. .40 - .42
tech., bbls., dms.....lb. .28 - .30
Nitrate, crude, bgs., c.i.f. ports. ton. No prices
Perchlorate,[6] kgs., wks.....lb. .09½- .11
Permanganate,[3] tech., dms., works..lb. .19¾- .20¼
USP, dms., wks.....lb. .20½- .21
Prussiate, red, bbls.....lb. No prices
Yellow, spot, bbls.....lb. .17 - .19
Ricinoleate, tech., bbls.....lb. .13 - —
Silicate alkaline, lumps, bgs., lb. .07 - —
Sulphate, NF, powd., 550 lbs., bbls..lb. .15 Nom.
100-lb. kgs.....lb. .17 - —
Prices on granular 4c. higher.

Potash, sulphate, tech., dom., bulk basis, 90%, K_2SO_4, ex vessel, ports..ton. 36.25 - —
imp., min., 90%, bgs., ex vessel, Atl. or Gulf ports..ton. No prices
Xanthate, dms., c.l.....lb. .12
Sulphocyanide, C.P., dms....lb. .75 - .85
N.F., dms.....lb. .55 - .65
Potash-magnesia, sulphate, dom., bulk, 40%, K_2SO_4, ex vessel, ports ton. 26.00 - —
Potash-soda ferricyanide, dms., works..lb. .40 - .43
Potash titanium oxalate, 350-lb. bbls..lb. .45 - —
100-lb. dms.....lb. .50 - —
Prickly ash bark, bls.....lb. .12 - .13
Berries, bgs.....lb. .26 - .26
Prince's pine herb, bls.....lb. .22 - .23
Procaine, hydrochloride, 25-lb. cns., lb. 8.00 - —
5-lb. cans.....lb. 8.25 - 8.50
1-lb. bots.....lb. 8.75 - —
Propane, tanks, Group 3.....gal. .03¾- .04
Psyllium seed (see Fleaseed).
Pulsatilla, bls.....lb. .85 - .90
Pumice, dom., grd., fine, 4F, 2F, F, O, bgs., 5 tons and up..lb. .03¼- —
1-4 tons.....lb. .03¾- —
500-2000 lbs.....lb. .03¾- —
under 500 lbs.....lb. .04 - —
coarse, O½, ½, 1, 1½, 2, 3, bgs., 5 tons and up..lb. .03½- —
1-4 tons.....lb. .03¾- —
500-2000 lbs.....lb. .03¾- —
under 500 lbs.....lb. .04¼- —

Pumice, Imp., Italian.....lb. No prices
Pumice stone packed in barrels is ½c. per lb. higher than the above prices.
Pumpkin seed, bgs.....lb. .10 - .11
Purple lake (see Red).
Putty, com'l, dms.....100 lbs. 3.15 - —
linseed oil, raw, dms....100 lbs. 5.00 - —
refined, dms.....100 lbs 5.50 - —
standard, dms.....100 lbs. 4.20 - —
Pyrethrum concentrate, liq. (20 to 1), basis 2 grams pyrethrins per 100 cc., dms., dlvd..gal. 4.20 - —
(30 to 1), 3 grams pyrethrins per 100 cc., dms., dlvd..gal. 6.20 - —
Pyrethrum flowers, coarse.. grad. (g.f.p), 9% pyrethrins, frt. alld., bbls..lb. .19 - .20
fine powd., 2% pyrethrins, frt. alld., bbls..lb. .20 - .21
Pyridin, denaturing, dms.....gal. 1.71 - —
refd., 2°, dms.....lb. .48 - —
Pyrites, Spanish, bulk, c.l.f. Atl. ports..unit-ton. No prices
Pyrocatechin, CP, cryst., works, fib. dms., tins..lb. 2.15 - 2.40
resublimed, fib. dms., tins..lb. 4.60 - —
Pyrophylite, standard, 200 mesh, c.l., mines..ton. 10.00 - —
325 mesh, same basis.....ton. 13.00 - —
No. 3, 200 mesh, c.l., mines. ton. 8.00 - —
325 mesh, same basis.....ton. 11.00 - —
Pyroxylin scrap amber, cs., works..lb. .12 - —
black, cs., works.....lb. .10 - —
china white, ivory, cs., works, lb. .13 - —
Pyroxylin, scrap, dense, white, cs., works..lb. .10 - —
gray, cs., works.....lb. .08 - —
mixed, mottles, opaques, cs., works..lb. .04 - —
translucent pastels, cs., works, lb. .10 - —
transparent, cs., works.....lb. .20 - —
colors, cs., works.....lb. .12 - —
shavings, amber, cs., works, lb. .16 - —
colors, mixed, cs., works...lb. .10 - —
white, cs., works.....lb. .15 - —



FROM THE ORIGINAL, PAINTED ESPECIALLY FOR NIAGARA ALKALI COMPANY BY JOHN ATHERTON

FROM THE POINT where two branch railroads meet to form a main line the roadbed usually runs in a straighter course, traffic moves faster and in greater volume, and the route leads to larger centers of service. At such a point are the business courses of Niagara Alkali Company and Electro Bleaching Gas Company. Affiliates for many years, they are now united in one organization to give smoother and more thoroughly efficient service to the customers whose requirements they each met so satisfactorily as separate organizations. Compact, strong, closely knit in manufacturing, research and personnel resources, this one company now operates under the name of NIAGARA ALKALI COMPANY.

EBG Niagara Alkali Company
60 EAST 42nd STREET, NEW YORK, N. Y.
CAUSTIC POTASH · CAUSTIC SODA
PARA · CARBONATE OF POTASH
Liquid Chlorine

Q

Quassia chips, bls.....lb. .05 - .06
Quebracho extract, liquid, 35% tan, bbls., works..lb. .05¾- —
tanks, works.....lb. .05¼- —
solid, 63%, bgs., c.l., ex dock, plus duty..lb. .04¼- —
clarified, 64%, bgs., c.l., same basis..lb. .05 - —
pwd., bgs., c.l.....lb. .10½- —
l.c.l., bgs.....lb. .11 - —
Queen of the meadow leaves bgs..lb. .07½- .08
Root, bgs.....lb. .10 - .11
Quercitron, crystals, bgs.....lb. .26 - —
extract, bgs., No. 1.....lb. .10 - —
No. 2.....lb. .09½- —
No. 3.....lb. .09 - —
solid, bzs.....lb. .18½- —
Quicksilver,[3,4,9] dom., flasks (76 lbs. net), dlvd., N.Y....flask. 192.00 - 195.00
Quince seed, bgs.....lb. 1.25 - 1.30
Quinidine, N.F.V., cryst., cns.oz. 1.06 - —
powd., precip., cns.....oz. 1.01 - —
Sulphate, cns.....oz. .71 - —
Subject to surcharge of 8½c. per oz; see note under Quinine.
Quinine, 100 ozs., cns.....oz. .84 - —
Acetate, cns.....oz. 1.05 - —
Arsenate, cns.....oz. 1.05 - —
Arsenite, cns.....oz. 1.07 - —
Bisulphate, cns.....oz. .69 - —
Citrate, cns.....oz. .78 - —
Dihydrobromine, bots.....oz. .82 - —
Dihydrochloride, bots.....oz. .82 - —
Ethylcarbonate, cns.....oz. .85 - —
Ferrocyanide, cns.....oz. 1.07 - —
Formate, cns.....oz. 1.00 - —
Hydrochlorosulphate, cns....oz. .81 - —
Glycerophosphate, cns.....oz. 1.20 - —
Hydrochloride, cns.....oz. .76 - —
Hydroiodide, cns.....oz. 1.05 - —
Hypophosphite, cns.....oz. 1.07 - —
Phosphate, cns.....oz. .90 - —
Salicylate, cns.....oz. .79 - —
Sulphate, USP, XI, cns.....oz. .67 - —
Sulphocarbolate, cns.....oz. 1.05 - —
Tannate, cns.....oz. .63 - —
Valerate, cns.....oz. .99 - —
Tartrate, cns.....oz. 1.03 - —
Quinine buyers must pay a surcharge of 8½c. per oz. to cover present war risk insurance, ocean freight rates, and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.
Quinine-urea hydrochloride, cns.oz. .81 - —
Subject to surcharge of 8½c. per oz; see note under Quinine.

R

R salt, dry, bbls.....lb. .55 - —
paste, dms.....lb. .52 - —
Rapeseed, Argentine, bgs.....lb. .07¾- .08¼
Dutch, bgs.....lb. No stocks
Indian, medium, recleaned, bgs., lb. .07½- .08
Japanese bgs.....lb. No stocks
Raspberries, dried, bls.....lb. .65 - .70
Red, alizarin lake, bbls., dlvd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. 1.10 - 1.90
Red, alizarin lake prices are ¼c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N.C., S.C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Cadmium, lithopone, deep shade, bbls., ton lots, works, frt. alld..lb. .95 - —
smaller lots.....lb. 1.00 - —
pkgs., ton lots.....lb. 1.00 - —
smaller lots.....lb. 1.05 - —
light shade, bbls., ton lots.lb. .80 - —
smaller lots.....lb. .85 - —
pkgs., ton lots.....lb. .85 - —
smaller lots.....lb. .90 - —
light-medium shade, bbls., ton lots..lb. .85 - —
smaller lots.....lb. .90 - —
pkgs., ton lots.....lb. .90 - —
smaller lots.....lb. .95 - —
maroon shade, bbls., ton lots, lb. 1.05 - —
smaller lots.....lb. 1.10 - —
pkgs., ton lots.....lb. 1.10 - —
smaller lots.....lb. 1.15 - —
maroon shade, deep, bbls., ton lots..lb. 1.15 - —
smaller lots.....lb. 1.20 - —
pkgs., ton lots.....lb. 1.20 - —
smaller lots.....lb. 1.25 - —
medium shade, bbls., ton lots, lb. .90 - —
smaller lots.....lb. .95 - —
pkgs., ton lots.....lb. .95 - —
smaller lots.....lb. 1.00 - —
Cadmium, lithopone quotations are at the works, changes prepaid or allowed E. of Rocky Mts.
Selenide, bbls., light, works.lb. 2.35 - —
maroon, works.....lb. 2.90 - —
Carmine, 40, dms., 100 lbs...lb. 4.00 - —
50 lbs.....lb. 4.75 - —
cns., 5 lbs.....lb. 5.25 - —
1 lb.....lb. 5.35 - —
Crocus martis (see Red, purple oxide).
Eosin toner, bbls.....lb. 1.25 - —
Fire toner, bbls.....lb. .85 - —
Indian, pure, bbls., f.o.b. Bethlehem, Easton, E. St. Louis, N. Y..lb. .09¼- —
80-85%, bbls., same basis..lb. .07¾- —
Iron oxide (see Red oxide).
Lacquer maroon, bbls., same basis..lb. 1.25 - —
Lake C toner, bbls., same basis, alizarin, lake, contracts..lb. .90 - —
open order.....lb. .90 - —
Litho toner, bbls., same basis, alizarin, lake, contracts..lb. .60 - —
Rose, lake, bbls.....lb. .25 - .29
Pink, bbls.....lb. .20 - .25

Red, lithol-rubine toner, bbls., same basis, alizarin lake, contracts..lb. 1.15 - —
Maroon lake, 25%, kgs., same basis, alizarin lake, contracts..lb. .40 - —
Mercury oxide, tech., bbls., 10,000 lbs..lb. 3.09 - —
smaller lots.....lb. 3.11 - —
Metallic, bbls., Pa., works...lb. .02 - —
Orange, Persian (see O).
Oxide, pure, bbls., c.l., wks..lb. .09 - —
reduced, 85% copperas oxide, bbls., l.c.l., f.o.b. Bethlehem, Easton, E. St. Louis, Copley, Ohio..lb. .08¾- —
80% copperas oxide, bbls., same basis..lb. .06¼- —
Para, toner, concent., kgs., same basis, alizarin lake, contracts..lb. .70 - —
open order.....lb. .75 -
Persian Gulf, oxide, bbls., l.c.l. lb. No prices
Phlexin toner (see Red, Eosin-toner)
Phosphotungstic rhodamine, Y, kgs..lb. 4.15 - —
Purple lake, kgs.....lb. .60 - 1.00
Oxide, bbls., f.o.b. Bethlehem, Easton, E. St. Louis..lb. .06¼- —
Toner, kgs.....lb. 1.50 - 2.00
Scarlet ink toner, kgs., same basis alizarin lake..lb. .55 - —
Lake, kgs., same basis alizarin lake..lb. .25 - .30
Spanish oxide, Grade 1, c.l., bbls., f.o.b. N.Y..lb. .04¾- —
l.c.l. .....lb. .04⅞- —
Grade 2, c.l., bbls., f.o.b. N.Y..lb. .04¼- —
l.c.l. .....lb. .04¾- —
Toluidin toner, kgs., same basis alizarin lake..lb. 1.20 - —
Tuscan, bbls., f.o.b. N.Y., E. St. Louis..lb. .11 - .40
Venetian, bbls., works.....lb. .0220- —
10%, bbls., works.....lb. .0245- —
15%, bbls., works.....lb. .0265- —
20%, bbls., works.....lb. .02¾- —
25%, bbls., works.....lb. .03 - —
30%, bbls., works.....lb. .03¼- —
35%, bbls., works.....lb. .0360- —
40%, bbls., works.....lb. .04 - —
Vermilion, Amer., bbls., f.o.b. N.Y..lb. .25 - .40
quicksilver, bbls.....lb. 3.20 - 3.27
Red dyes are listed under Dyes.
Red, precipitate, N. F., powd., fib. dms., 50 lbs. or more. lb. 3.26 - —
Red saunders wood, ground, bbls. lb. .35 - —
Resorcinol, tech., 200-lb. dms., frt. alld. E. of Miss..lb. .68 - —
smaller quantities, works..lb. .74 - —
USP, cryst., 100 lbs., dms., frt. alld. E. of Miss..lb. 1.80 - —
Rhatany root, bgs.....lb. .10 - .11
Rhubarb, No. 1, high, dried, cs.lb. .50 - .65
powd., bbls.....lb. .55 - .67
No. 2, cs.....lb. .39 - .40
powd., bbls.....lb. .42 - .44
Rifampin .....gram 1.50 - 2.00
Rochelle salt, cryst., bbls., 5,000 lbs., 1 ship't..lb. .43¼- —
smaller lots.....lb. .44 - —
powd., bbls., 5,000 lbs., 1 ship't..lb. .42½- —
smaller lots.....lb. .43 - —
Rose flowers, pale, bls.....lb. .42 - .43
red, bls.....lb. 5.00 Nom.
Rosemary, flowers, bls.....lb. .45 - .50
leaves, bls.....lb. .16 - .17
Rosin, gum, B, bbls., ex dock... 100 lbs. 2.96 - —
D, bbls.....100 lbs. 3.00 - —
E, bbls.....100 lbs. 3.02 - —
F, bbls.....100 lbs. 3.01 - —
G, bbls.....100 lbs. 2.99 - —
H, bbls.....100 lbs. 2.99 - —
I, bbls.....100 lbs. 2.99 - —
K, bbls.....100 lbs. 3.02 - —
M, bbls.....100 lbs. 3.13 - —
N, bbls.....100 lbs. 3.23 - —
W. G., bbls.....100 lbs. 3.34 - —
W. W., bbls.....100 lbs. 3.45 - —
X, bbls.....100 lbs. 3.45 - —
Rottenstone, dom., bgs., c.l., f.o.b. mines..ton.25.50 - —
l.c.l., f.o.b. mines.....ton.37.50 - —
import, lump, bbls.....lb. No prices
powd., bbls.....lb. No prices
Rue, bls.....lb. .30 - .35

S

Sabadilla seed., powd., bbls....lb. .22 - .23
Saccharin, dms., 100 lbs.....lb. 1.45 - —
cns., 25 lbs.....lb. 1.48 - 1.50
Scullcap, Eastern, bls.....lb. .28 - .29
Western, bls.....lb. .14 - .15
Safflower, bls.....lb. .35 - .40
Saffron, Mexican, bls.....lb. .40 - .45
Spanish, tins.....lb.39.00 -40.00
Safrol, cns.....lb. 1.75 - 1.85
dms.....lb. No prices
Sage, Cyprus, bls.....lb. .80 - .85
Dalmatian, garden, bls.....lb. 1.45 - 1.50
ground, bls.....lb. 1.75 Nom.
Greek, bls.....lb. 1.25 - 1.30
Spanish, bls.....lb. .39 - .40
Sago flour, bgs.....lb. .04½- .05½
Salicin, bots., 5 lbs.....lb. 7.00 - —
cns., 25 lbs.....lb. 6.75 - —
Salol, gran., bbls., 200-lbs....lb. .90 - —
bxs., 25 lbs.....lb. .93 - —
kgs., 100 lbs.....lb. .90 - —
powd., fib. dms., 25 lbs.....lb. 1.03 - —
kgs., 100 lbs.....lb. 1.00 - —
Salt, rock, bgs., dlvd. N.Y..ton.14.20 - —
l.c.l., bgs., dlvd. N.Y...ton.17.00 -18.00
vacuum, common, fine, bgs., c.l., dlvd. N. Y..ton.15.70 - —
l.c.l., dlvd. N. Y.....ton.19.40 -23.20
Saltcake, dom., bulk, works..ton.15.00 - —
import, bulk, c.i.f.....ton.16.00 Nom.
Chrome (see Chrome cake).
Saltpeter, dbl. refined, cryst., 10-20 tons, bbls...100 lbs. 9.10 -10.10
1-9 tons.....100 lbs. 9.25 -10.25
less than ton lots..100 lbs. 9.50 -10.50
gran., bbls., 10-20 tons..... 100 lbs. 8.10 - —
1-9 tons.....100 lbs. 8.25 - —
less than ton lots..100 lbs. 8.50 - —
powd., bbls., 10-20 tons..... 100 lbs. 9.10 - —
1-9 tons.....100 lbs. 9.25 - —
less than ton lots..100 lbs. 9.50 - —
Santonin, cryst., cns.....kilo.175.00 -180.00
Saponin, crude, cns.....lb. 2.25 - 2.50
Purified, cns., 25 lbs.....lb. 3.00 - 3.25
Sarsaparilla root, Honduras, bls., lb. .32 - .33
Mexican, bls.....lb. .19 - .20
Sassafras, bark, ord., bls.....lb. .13 - .14
select, bls.....lb. .20 - .21
Savory, bls.....lb. 1.35 Nom.
Saw palmetto berries, bgs.....lb. .08 - .09
Scammony root, bgs.....lb. .07 - .08
resin, lump, cns.....lb. .85 - —
powd., bxs.....lb. .90 - —
Schaeffer's salt, bgs.....lb. .46 - —
Seidlits mixture, bbls., 5,000 lbs., 1 shipment..lb. .33¾- —
smaller lots.....lb. .34½- —
kegs, 5,000 lbs., 1 shipm't..lb. .34¼- —
smaller lots.....lb. .34¾- —
Selenium, pwd. A, 10-lb. tins..lb. 2.00 - —
100-lb. cases.....lb. 1.75 - —
Senega root, spot, bls.....lb. .95 - 1.00
Senna leaves, Alexandria, half leaf, bls..lb. .18 - .20
siftings, bgs.....lb. .17 - .19
Tinnevelly, No. 1, bls.....lb. .13 - .14
2 bls.....lb. .11 - .13
3 bls.....lb. .10 - .11
powd., bbls., bxs.....lb. .13 - .14
Pods., bls.....lb. .10 - .11
Serpentaria root, bls.....lb. .60 - .65
Shellac, bleached, bonedry, bbls., f.o.b. N. Y..lb. .37 - .38
dlvd., Boston.....lb. .38 - .39
Chicago .....lb. .38½- .39½
Pacific Coast.....lb. .40½- .41½
rfd., bbls., f.o.b. N. Y.....lb. .43 - .44
dlvd., Boston.....lb. .43½- .44½
Chicago .....lb. .44⅞- .45⅞
Pacific Coast.....lb. .46¾- .47⅞
Garnet, bgs.....lb. .30 - .31
D.C., V.S.O., or Diamond 1, cs., lb. .39 - .40
Superfine, bgs., f.o.b. Boston, N. Y..lb. .30 - .31
dlvd., Chicago.....lb. .30½- .31½
Pacific Coast.....lb. .33 - .34
T.N., bgs., f.o.b. Boston, N.Y., lb. .29 - .30
Pacific Coast.....lb. .32½- .33½
dlvd., Chicago.....lb. .29½- .30½
Shellac, varnish, Metro area, orange, 5-lb. cut, bbls., gal. 1.55 - 1.60
4½-lb. cut, bbls.....gal. 1.50 - 1.55
4-lb. cut, bbls.....gal. 1.45 - 1.50
white, 5-lb. cut, bbls.....gal. 1.70 - 1.75
4½-lb. cut, bbls.....gal. 1.65 - 1.70
4-lb. cut, bbls.....gal. 1.60 - 1.65
Prices, dlvd., Boston or Chicago, 10c. per gal. higher.
Silica, amorph., dry-grd., 95-97%, 325 mesh, bgs., c.l., works..ton.17.00 - —
l.c.l., 2½ tons, works, ton.19.00 - —
smaller lots, works..ton.20.00 - —
wet-grd., 95-97%, 325 mesh, bgs., c.l., works..ton.19.00 - —
l.c.l., 2½ tons, works, ton.21.00 —
smaller lots, works..ton.25.00 - —
400 mesh, bgs., c.l., works, ton.30.00 - —
l.c.l., 2½ tons, works, ton.35.00 - —
smaller lots, works..ton.38.00 - —
96-98% 325 mesh, bgs., c.l., works..ton.20.00 - —
l.c.l., 2½ tons, works..ton.21.50 - —
smaller lots, works..ton23.00 - —
99%, 325 mesh, bgs., c.l., works..ton.22.00 - —
med., grd., 99%, 325 mesh, l.c.l., 2½ tons, works..ton.25.50 - —
hard-quartz, 99½%, 325 mesh, bgs., c.l., works..ton.13.50 - —
l.c.l., works.....ton.18.50 - —
140 mesh, bgs., c.l., works, ton.11.00 - —
l.c.l., works.....ton.16.00 - —

Red, Lithol—Soda Ash

Silver, bullion.....oz. .34⅜- —
Govt. purchase, dom., metal, oz. .7111- —
Govt. purchase, foreign metal, oz. .35 - —
Cyanide, cns., 2,500 ozs.....oz. .33 - —
1,000 ozs.....oz. .33½- —
500 ozs.....oz. .33½- —
80 to 100 ozs.....oz. .33⅜- —
Nitrate, 100-oz. bots.....oz. .24 - —
Nucleinate, bots., dms.....oz. .29 - .34
Protelnate, bots., dms.....oz. .28 - .33
Simarubra barks, bls.....lb. .40 - .45
Skunk cabbage root, bls.....lb. .11 - .12
Slate flour, bgs., c.l., works..ton. 9.00 - —
l.c.l., works.....ton.10.00 -15.00
Sloe berries, bgs.....lb. .60 - .65
Smalt, black, extra velvet, ctns., lb. .05 - .08
Blue, ctns.....lb. .07 - .08½
Snakeroot, Canada, bls.....lb. .24 - .26
Soapbark, bls.....lb. .09 - .10
crushed, bls., bbls.....lb. .13 - .13½
cut, German, bls., bbls.....lb. No stocks
dom., bbls.....lb. .16 - .18
powd., bbls.....lb. .16 - .17
Soda, acetate, anhyd., dms., dlvd. lb. .08½- .10
flake, gran., powd., 60%, dms., c.l., dlvd..lb. .04½- .05
l.c.l., dlvd.....lb. .05 - .06
USP, bbls., dlvd.....lb. .06 - .07
Alginate, dms., bbls., works.lb. .69 - .70
Aluminate, white soluble, c.l., bgs., frt. equald..100 lbs. 7.50 - —
dms., frt. equald.....100 lbs. 7.75 - —
l.c.l., bgs., frt. equald.100 lbs. 8.40 - —
dms., frt. equald.....100 lbs. 8.65 - —
Antimoniate, bbls., dlvd.....lb. .15 - .15½
Arsenate, dms., dealers, c.l., works..lb. .08 - —
l.c.l., dms.....lb. .09¼- .09⅝
Arsenite, dry, gray, dms., c.l., dealers, works..lb. .06¾- —
l.c.l., dms., works.....lb. .07½- .08½
white, dms., c.l., dealers, works..lb. ..07¾- —
l.c.l., dms., works.....lb. .08½- .09¼
Soda arsenite, dry, gray, prices are ¾c. per pound higher in Chicago; 1c. per pound higher in Houston, Tex., and Colorado. White prices are 1c. per pound higher in Tex. and Colo.
Ash, dense, 58%, bgs., c.l., works..100 lbs. 1.15 - —
l.c.l., Zone 1.....100 lbs. 2.18 - —
2 .....100 lbs. 2.33 - —
3 .....100 lbs. 2.58 - —
4 .....100 lbs. 2.98 - —
bbls., c.l., works...100 lbs. 1.35 - —
l.c.l., Zone 1.....100 lbs. 2.35 - —
2 .....100 lbs. 2.50 - —
3 .....100 lbs. 2.75 - —
4 .....100 lbs. 3.15 - —
bulk, c.l., works...100 lbs. .95 - —
extra light, 59%, bgs., c.l. 100 lbs. 1.05 - 1.13
l.c.l., Zone 1.....100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.93 - —
bbls., c.l., works....100 lbs. 1.45 - —
l.c.l., Zone 1.....100 lbs. 2.45 - —
2 .....100 lbs. 2.60 - —
3 .....100 lbs. 2.85 - —
4 .....100 lbs. 3.25 - —
bulk, c.l.....100 lbs. .90 - —

Spot Deliveries

Sodium Hydrosulphite

CAUSTIC POTASH . . . NICKEL SULPHATE . . . COPPER CARBONATE
WHITE HEAVY CALCINED MAGNESIA . . . SODIUM FLUORIDE
WHITE CALCINED MAGNESITE . . . . . ZINC SULPHATE

OTHER SPECIAL PRODUCTS

Distributors for THE RUFERT CHEMICAL COMPANY

NICKEL FORMATE . . . . ALSO NICKEL CATALYST
NICKEL CARBONATE . . . NICKEL OXIDE . . . ETC.

GOLWYNE CHEMICALS CORPORATION

420 LEXINGTON AVENUE • NEW YORK, N. Y. • PHONE LE 2-9740

Soda Ash—Strophantus Seed

Soda ash, light, 58%, bgs., c.l., works..100 lbs. 1.05 - 1.13
l.c.l., Zone 1.....100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.93 - —
bbls., c.l., works.....100 lbs. 1.35 - —
l.c.l., Zone 1.....**100 lbs. 2.35** - —
2 .....**100 lbs. 2.50** - —
3 .....**100 lbs. 2.75** - —
4 .....**100 lbs. 3.15** - —
bulk, c.l.....100 lbs. .90 - —

Soda ash l.c.l. prices are per 100 lbs. f.o.b. recognized warehouse point and include delivery in any quantity to customer's sidewalk within recognized local trucking distance of seller's warehouse. The sales zones are:—Zone 1: All Northern U.S. E. of Miss. River and North of the Southern boundaries of Ky. and Va., including also St. Louis, Mo., and Davenport, Ia., parallel La., Miss., Ala., South of 31° Texas, E. of 100° Meridian and S. of 31° parallel and Fla., in Mo., N. H. and Vt.; special local zone prices apply for ship't to various counties. Zone 2: Ark. East of 93° Meridian; Neb., E. of 98° Meridian; Tex., N. of 31° parallel and E. of 100° Meridian (except Wichita Falls), Ala., La., and Miss. N. of 31° parallel; Iowa (except Davenport), Ga., Minn., Mo. (except St. Louis), N. and S. C. and Tenn. Zone 3: Kansas, Neb., W. of 98° Meridian, Tex., W. of 100° Meridian (including Wichita Falls, but excluding El Paso), N. and S. D., Okla., Ark., W. of 93° Meridian. Zone 4: El Paso, Tex.; Ariz., Colo., Idaho, Mont., Nev., N. M., Utah and Wyoming.

Soda, benzoate, tech., bbls., 4,000 lbs. or more..lb. .39 - —
1,000 to 3,900 lbs.....lb. .40 - —
900 lbs. or less.....lb. .43 - —
USP, bbls., fib., 4,000 lbs. or more..lb. .46 - —
1,000 to 3,900 lbs.....lb. .47 - —
900 lbs. or less.....lb. .50 - —
Bicarbonate, tech., bbls., c.l., works..100 lbs. 1.70 - —
l.c.l. .....100 lbs. 2.05 - —
bgs., c.l.....100 lbs. 1.55 - —
l.c.l. .....100 lbs. 1.90 - —
USP, gran., bbls., c.l., works, 100 lbs. 2.25 - —
l.c.l. .....100 lbs. 2.60 - —
powd., bbls., c.l., works.... 100 lbs. 1.85 - —
l.c.l., dlvd., N.Y..100 lbs. 2.51 - —
kgs., c.l.....100 lbs. 2.10 - —
l.c.l., dlvd., N.Y..100 lbs. 2.76 - —
Bichromate, [2], [5] spot, c.l., wks., lb. .07¾- —
l.c.l., 6 cks., or 10 bbls. or over, works..lb. .07½- —
5 cks. or 9 bbls. or less, works..lb. .07¾- —
Bifluoride, bbls., c.l.....lb. .11 - —
10 bbls. lots.....lb. .11¼- .13
1-9 bbls.....lb. .12 - —
kegs .....lb. .12½- .14
Bisulphite, powd., bbls., c.l., works..100 lbs. 3.00 - 3.10
l.c.l., works.....100 lbs. 3.50 - 3.60
solution, 32 deg., bbls., c.l., works..100 lbs. 1.30 - —
l.c.l., bbls., works..100 lbs. 1.55 - —
33 deg., bbls., c.l., works, 100 lbs. 1.35 - —
l.c.l., bbls., works..100 lbs. 1.60 - —
35 deg., c.l., works....100 lbs. 1.40 - —
l.c.l., bbls., works..100 lbs. 1.65 - —
44 deg., bbls., works.100 lbs. 1.55 - —
l.c.l., bbls., works..100 lbs. 1.80 - —
Bromide, USP, gran., bbls., 500 lbs..lb. .27 - .31
fiber dms., 100 lbs.....lb. .28 - .32
Cacodylate, 1-kilo bots.....lb. No prices
Carbonate (see Soda ash, soda monohydrated, soda sal).
Caustic, flake, 76% powd., ammon. process, bbls., c.l., works..100 lbs. 2.95 - —
dms., c.l., works..100 lbs. 2.70 - —
l.c.l., Zone 1....100 lbs. 3.55 - 4.90
2 .....100 lbs. 3.70 - 5.05
3 .....100 lbs. 3.95 - 5.30
4 .....100 lbs. 4.35 - 5.70
Soda caustic, electro process, dms., c.l., works..100 lbs. 2.70 - —
L.c.l., same zone prices as ammonia process
liquid, 47-49%, buyers' tanks, works..100 lbs. 1.92½- —
sellers' tanks, works..... 100 lbs. 1.95 - —
70%, buyers' tanks, works, 100 lbs. 1.97½- —
sellers' tanks, works..... 100 lbs. 2.00 - —
solid, 76% ammon., process, dms., c.l., works..100 lbs. 2.30 - —
l.c.l., Zone 1....100 lbs. 3.15 - —
2 .....100 lbs. 3.30 - —
3 .....100 lbs. 3.55 - —
electro process, dms., c.l., works..100 lbs. 2.30 - —

Soda, caustic, solid, electro process, dms., l.c.l., same zone prices as ammon. process. Caustic soda, l.c.l., prices are on the same basis as those for soda ash. The sales zones are also the same.

Chlorate, dom., cryst., bgs., c.l., works..lb. .06¼- —
l.c.l., works....lb. .06½- —
powd., bgs., c.l., works..lb. .06½- —
l.c.l., works.....lb. .07 - .08½
Chromate, [2,5] spot, c.l., works, lb. .08¾- —
l.c.l., 6 cks., 10 bbls. or over, works..lb. .09½- —
Citrate, USP VIII, 225-lb. bbls. lb. .18½- —
cns., dms., 50-lb. lots....lb. .20½- —
25-lb. lots.....lb. .22½- .23½
dms., kgs., 100-lb. lots...lb. .19½- —
USP XI, gran., bbls., 250-lb. lots..lb. .24 - —
boxes, 50-lb. lots.....lb. .26 - —
cns., 25-lb. lots.....lb. .28 - .29
kgs., 100-lb. lots.....lb. .25 - —
powd., bbls., 250-lb.lots..lb. .24½- —
boxes, 50-lb. lots.....lb. .26½- —
cns., 25-lb. lots.....lb. .29½- —
kgs., 100-lb. lots.....lb. .25½- —
Cyanide, 96-98%, dom., dms.lb. .14 - .15
imports, 90%, cs.....lb. No prices
Diacetate, 33-35% acidity, bbls., dlvd..lb. .10 - —
anhy., dms., dlvd.....lb. .12½- —
Fluoride, white, 30%, bbls., c.l., frt. alld..lb. .08 - —
l.c.l., 10 or over, same basis..lb. .08¼- —
1-9, same basis.....lb. .09 - —
95%, bbls., c.l., same basis, lb. .08¼- —
l.c.l., 10 or over, same basis..lb. .08¾- —
1-9, same basis.....lb. .09¼- —
Soda fluoride prices at Los Angeles are f.a.s. works.
Glycerophosphate, NF, cryst., bbls., 1,000-lb. lots....lb. 1.25 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.65 - —
powd., bbls., 1,000-lb. lots, lb. 1.30 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.70 - —
solution, cbys., cns.....lb. .82 - 1.02
Hydrosulphite, dms., frt. alld..lb. .17 - .18
Hydroxide, USP, sticks, cns., 100 to 1,000-lb. lots..lb. .22 - .24
Hypophosphite, N. F., cns., 100-
Hyposulphite, cryst., large, bgs., works, frt. equal'd..100 lbs. 2.25 - —
bbls., same basis..100 lbs. 2.45 - —
l.c.l., bge., works, frt. equal'd..100 lbs. 2.50 - —
bbls., same basis..100 lbs. 2.70 - —
pea, bgs. c.l., works.100 lbs. 2.60 - —
bbls., works.....100 lbs. 2.80 - —
dms., works.....100 lbs. 3.10 - —
5,000 lbs. and over, bgs., works..100 lbs. 2.75 - 3.00
bbls., works.....100 lbs. 2.95 - 3.20
dms., works.....100 lbs. 3.25 - 3.60
2,500 to 5,000 lbs., bgs., works..100 lbs. 2.85 - 3.10
bbls., works.....100 lbs. 3.05 - 3.30
dms., works.....100 lbs. 3.35 - 3.60
500 to 2,500 lbs., works.... 100 lbs. 3.10 - 3.25
bbls., works.....100 lbs. 3.30 - 3.55
dms., works.....100 lbs. 3.60 - 3.95
pea, less than 500 lbs., bgs., works..100 lbs. 3.70 - 3.95
bbls., works.....100 lbs. 3.90 - 4.15
dms., works.....100 lbs. 4.20 - 4.45
Soda, iodate, jars.....lb. 5.40 - —
Iodide, jars.....lb. 2.42 - —
bots. .....lb. 2.52 - 2.57
Mandelate, 100-lb. dms.....lb. 3.25 - —
Metanilate, bgs.....lb. .40 - —
Metasilicate, anhyd., dms., c.l., works, frt. equaid..100 lbs. 4.00 - —
15 dms. and over, dlvd. N.Y..100 lbs. 4.90 - —
3-14 dms., same basis... 100 lbs. 5.05 - —
1-2 dms., same basis... 100 lbs. 5.30 - —
gran., bbls., c.l., works....lb. 2.50 - —
10 bbls. and over, dlvd. N.Y..lb. 3.30 - —
1-9 bbls., dlvd. N.Y.....lb. 3.55 - —
Molybdate, anhyd., kgs., works, lb. .47 - —
Monohydrated, bbls.....100 lbs. 2.60 - —
works .....100 lbs. 2.30 - —
Naphthionate, bbls.....lb. .50 - —
Nitrate, crude, dom., c.l., 100-lb. bgs., dlvd., f.o.b. cars, producing points or ports, rail or boat shipment .....ton.30.05 - —
200-lb. bgs., same basis, ton.29.35
bulk, same basis.....ton.27.00 - —
imp., c.l., 100-lb. bgs., f.o.b. cars, Atl., Gulf, Pac. warehouses, rail or boat shipment...ton.33.00 - —
200-lb. bgs., same basis, ton.32.40 - —
bulk, same basis....ton.30.00 - —
refd., gran., bbls., 10 tons, 100 lbs. 2.50 - —
1-9 tons.....100 lbs. 2.65 - —
smaller lots.....100 lbs. 2.90 - —
powd., bbls., 10 tons.100 lbs. 5.50 - —
1-9 tons.....,100 lbs. 5.65 - —
Nitrite, 96-98%, dom., bbls., c.l., works, frt. equalized, lb. .06¾- —
96-98% dom., bbls., c.l., West Coast, f.o.b. ports....lb. .08 - —
l.c.l. .....lb. .08¼- .11¼
Soda nitrite l.c.l. prices range represents delivery at various points.
Orthosilicate, anhyd., dms., c.l., works, frt. equaid..lb. 4.50 - —
15 dms. and over, same basis..lb. 5.45 - —
3-14 dms., same basis..lb. 5.60 - —
1- 2 dms., same basis..lb. 5.85 - —
flake, dms., c.l., works.. 100 lbs. 3.15 - —
10 bbls. and over, dlvd. N.Y.C..100 lbs. 4.30 - —
1-9 bbls., same basis..100 lbs. 4.55 - —
Oxalate, neut., bbls.....lb. .09½- —
kgs. .....lb. .44 - —
Perborate, NF, bbls., c.l., works, lb. .14¾- —
l.c.l., works.....lb. .15¼- —
Pentachlorphenate briquets, single bgs., works..lb. .26 - —
70 lbs., bgs., works.....lb. .19½- —
490 lbs., bgs., works....lb. .17½- —
powd., 100 lbs., bgs., works, lb. .19 - —
500 lbs., bgs., works.....lb. .17 - —
Phosphate, dibasic, anhyd., bgs., c.l., works..100 lbs. 6.00 - 6.25
l.c.l., works.....100 lbs. 6.15 - 7.25
bbls., c.l., works....100 lbs. 6.20 - 6.45
l.c.l., works.....100 lbs. 6.70 - 7.45
cryst., tech., bgs., c.l., wks. 100 lbs. 2.55 - 2.70
l.c.l., works.....100 lbs. 2.95 - 3.45
bbls., c.l., works...100 lbs. 2.75 - 2.90
l.c.l., works.....100 lbs. 3.15 - 3.65
monobasic, anhyd., bgs., c.l., works..100 lbs. 7.25 - 8.25
l.c.l., works.....100 lbs. 8.00 - 9.00
bbls., c.l., works.....100 lbs. 7.45 - 8.45
l.c.l., works.....100 lbs. 8.20 - 9.20
tribasic, bgs., c.l., works..lb. 2.70 - 2.85
l.c.l., works.....100 lbs. 3.10 - 3.60
bbls., c.l., works...100 lbs. 2.90 - 3.05
l.c.l., works.....100 lbs. 3.30 - 3.80
kegs, c.l., works...100 lbs. 3.40 - 3.55
l.c.l., works.....100 lbs. 3.75 - 4.30
USP (dibasic), bbls., dms., works..lb. .08 - .10
dried, bbls., dms., works..lb. .11½- .16
Picranate, kgs.....lb. .65 - —
Soda, prussiate, yellow, bbls., 10,000 lbs. or more..lb. .11 - —
contracts .....lb. .10 - —
smaller lots.....lb. .11¼- —
contracts .....lb. .10¾- —
Pyrophosphate, anhyd., bgs., c.l., works, frt., equal'd 100 lbs. 5.10 - 6.10
5 tons and over same basis.. 100 lbs. 5.35 - 6.25
less than 5 tons same basis, 100 lbs. 5.60 - 6.60
bbls., c.l., works, frt. equalized..100 lbs. 5.30 - 6.30
5 tons and over same basis, 100 lbs. 5.55 - 6.45
less than 5 tons same basis, 100 lbs. 5.80 - 6.80
Ricinoleate, tech., bbls.....lb. .12 - —
Sal., bgs., dlvd., N. Y..100 lbs. 1.20 - —
works .....100 lbs. 1.00 - —
bbls., dlvd., N. Y.....100 lbs. 1.30 - —
works .....lb. 1.10 - 1.30
Salicylate, bxs.....lb. .52 - .55
Sesquicarbonate, bgs., c.l., works..100 lbs. 1.50 - —
bbls., c.l., works...100 lbs. 1.70 - —
bbls., l.c.l., Zone 1....100 lbs. 2.70 - —
2 .....100 lbs. 2.85 - —
3 .....100 lbs. 3.10 - —
4 .....100 lbs. 3.50 - —
Soda sesquicarbonate l.c.l. prices are on same basis as those for soda ash and caustic soda. The sales are also the same.
Sesquisilicate, dms., c.l., works. 100 lbs. 3.03 - —
10 bbls. or over, dlvd. N.Y.C., 100 lbs. 4.05 - —
1-9 bbls.....100 lbs. 4.30 - —
Silicate, 40° turbid, dms., c.l., works..100 lbs. .80 - —
l.c.l., 5 or more, works, 100 lbs. 1.05 - —
1 to 4, works....100 lbs. 1.20 - —
52°, dms., c.l., works..100 lbs. 1.40 - —
l.c.l., 5 or more, works, 100 lbs. 1.65 - —
1 to 4, works....100 lbs. 1.80 - —
Silicofluoride, dom., bbls.....lb. .12 - .15
Stannate, dms.....lb. .33½- .36½
Stearate, lump, powd., bbls., works..lb. .19 - .24
Sulphate, anhyd., bgs., bbls., c.l., works..100 lbs. 1.70 - 1.90
5 tons or over, works, 100 lbs. 1.95 - 2.15
less than 5 tons, works, 100 lbs. 2.20 - 2.40
cryst. (see Glauber's salt).
N.V. VI, ex-siccated, pwd., bbls..lb. .07 -- .07½
U.S.P. cryst., gran., bbls..lb. .10 - .10½
Sulphide, cryst., bbls., c.l., works..100 lbs. 2.40 - —
l.c.l., 5 tons or over, dlvd. 100 lbs. 2.90 - —
less than 5 tons, dlvd. 100 lbs. 3.15 - —
solid, bbls., c.l., works, 100 lbs. 3.15 - —
l.c.l., 5 tons or over, dlvd., 100 lbs. 3.65 - —
less than 5 tons, dlvd. 100 lbs. 3.90 - —
Sulphite, cryst., bgs., 100 lbs., works..lb. 2.10 - 2.35
bbls. .....100 lbs. 2.30 - 2.55
powd., bbls., c.l.....100 lbs. 5.25 - —
l.c.l., 5 or more...100 lbs. 5.50 - —
1 to 4.....100 lbs. 6.00 - —
Sulphocarbolate, gran., bbls., dms..lb. .26 - .28
Sulphocyanide, C.P., dms....lb. .55 - .65
Sulphohydrate, liquid, 38%, basis 100%, dms., c.l., f.o.b. works..lb. .05½- —
l.c.l., works.....lb. .06 - —
single dm. lots, works...lb. .08 - —
tanks, works.....lb. .04½- —
flake, 70-72%, dms., c.l., works, lb. .04½- —
l.c.l., works.....lb. .05 - —
Sulphoricinolate, bbls.....lb. .12 - —
Thiosulphate (see Hyposulphite).
Tungstate, CP, kgs.....lb. No prices
tech., kgs.....lb. 1.35 - 1.50
Solvent, naphtha, dms., wks.gal. 31 - —
tanks, E. of Omaha, frt. alld., gal. .26 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .26 - —
high-flash, dms., works..gal. .31 - —
tanks, E. of Omaha, frt. alld..gal. .26 - —
Sorbitol, com'l, dms., c.l., works, lb. .14¾- —
ton lots, contracts, works, lb. .15¼- —
smaller lots, works.....lb. .15¾- —
Soybean meal, 41%, bgs.....ton.39.70 - —
protein, bgs., c.l., works....lb. .20 - —
l.c.l., 10-20 tons, works....lb. .20¼- —
100-20,000 lbs., works....lb. .20½- —
smaller lots, works.....lb. .24 - —
Sparteine sulphate, cns.....oz. 3.65 - 3.95
Spearmint leaves, bls.....lb. .33 - .35
Spikenard root, bls.....lb. .16 - .17
Spruce extract, reg., bbls., c.l., works..lb. .01¾- —
tanks, works.....lb. .01¼- —
powd., super, bgs., c.l., works, lb. .04½- —
super, bbls., c.l., works.....lb. .02 - —
tanks, works.....lb. .01½- —
Squawvine, leaves, bls.....lb. .14 - .15
Squill, red, powd.....lb. .50 - .60
White, bls.....lb. .21 - .23
powd., bbls., bxs.....lb. .35 - .40
St. Ignatius beans, bgs.....lb. .45 - .46
St. John's Bread, edible, bls., lb. .15 - .20
inedible, bls.....lb. .09 - .10
Starch, corn, pearl, bgs., f.o.b. Chicago..100 lbs. 3.10 - —
dlvd., N. Y.....100 lbs. 3.45 - —
powd., bgs., f.o.b. Chicago, 100 lbs. 3.20 - —
dlvd., N. Y.....100 lbs. 3.55 - —
Potato, dom., bgs., c.l.....lb. .0585- —
l.c.l. .....lb. .0710- —
import, bgs.....lb. No prices
rice, bgs.....lb. .09 - .10
Sweetpotato, bgs.....lb. .06¼ Nom.
bbls. .....lb. .07 Nom.
Wheat, thick, boil, bgs.....lb. .05 - —
Starch, iodide, bots.....lb. 1.87 - —
Staveacre, seed, bgs.....lb. .35 - .40
Stearin, oleo.....lb. .10 - .10½
Stillingia root, bls.....lb. .07½- .08
Stoneroot, bls.....lb. .07½- .08
Storax, cs.....lb. 2.00 Nom.
Stramonium leaves, bls.....lb. .32 - .33
Strontium bromide, cns.....lb. .53 - .55
Carbonate, NF, IV, 250-lb. bbls..lb. No prices
tech., 99-100%, precip., bbls., lb. .25 Nom.
Chloride, tech., bbls.....lb. .20 - .22
Iodide, bots., 5 lbs.....lb. 3.06 - —
jars, 25 lbs.....lb. 3.00 - —
Nitrate, dom., bbls., c.l., works, lb. .07¾- —
25 bbls. and over.....lb. .08¼- —
1-24 bbls. and over.....lb. .08¾- —
Strophanthus seed, Kombe, bgs.lb. 3.75 - 4.00

ADD POWER AND SPEED
TO YOUR CLEANERS WITH

Cowles DRYMET ANHYDROUS SODIUM METASILICATE
REG. U. S. PAT. OFF.

★ You can use DRYMET easily and economically wherever regular metasilicate is used—alone as a cleaner—or in cleaning compounds. Six pounds of DRYMET replace ten pounds of regular metasilicate—save money and do a better job. There is no water in DRYMET to cause caking.

DRYMET is available for Immediate Delivery—any quantity.

WRITE **THE COWLES DETERGENT COMPANY**
WIRE **Heavy Chemical Department**
PHONE **Cleveland, Ohio**

For Detailed Recommendations **MAIL THIS COUPON *TODAY!***

THE COWLES DETERGENT COMPANY, 7016 Euclid Avenue, Cleveland, Ohio.
Quote prices and advise most economical use for DRYMET in the following work—

COMPANY STREET & No.

CITY SIGNED

☐ We are also interested in DRYORTH—technically anhydrous sodium orthosilicate.

Strolyl, acetate, bots.....lb. 3.10 - 3.25
Strychnine, cryst., cns., 100-oz. lots..oz. .60 - —
Acetate, 25-oz. cns., 100-oz. lots..oz. .79 - —
Arsenate, 25-oz. cns., 100-oz. lots..oz. .82 - —
Arsenite, 25-oz cns., 100-oz. lots..oz. .79 - —
Glycerophosphate, 25-oz. cns., 100-oz. lots..oz. .80 - —
Hydrochloride, 25-oz. cns., 100-oz. lots..oz. .79 - —
Hypophosphite, 25-oz. cns., 100-oz lots..oz. .91 - —
Nitrate, 25-oz. cns., 100-oz. lots..oz. .73 - —
Phosphate, 25-oz. cns., 100-oz. lots..oz. .80 - —
Sulphate, cryst., cns., 100-oz. lots..oz. .50 - —
powd., cns., 100-oz. lots.oz. .40 - —
Sucrose Octa-acetate, C.P. grade., bbls., l.c.l., works..lb. .55 - —
denat., bbls., l.c.l., works..lb. .45 - —
tech., bbls., l.c.l., works.....lb. .40 - —
Sugar coloring, bbls.....gal. .75 - 1.45
Milk, bbls., c.l.....lb. .24 - —
l.c.l., 10 or over.....lb. .25 - —
less than 10.....lb. .26 - —
Sulfadiazine, tablets, bots., 50's. ea. 4.86 - —
100's .....ea. 8.46 - —
1,000's .....ea.72.00 - —
Sulfaguanidine, 3.5-gm. bot..doz, 3.50 - —
4-oz bots.....ea. 8.10 - —
1-lb. bots.....ea.30.00 - —
Sulfanilamide, 5 lbs., bots....lb. 1.70 - —
fib. dms., 1,000 lbs., 1 delivery, lb. 1.25 - —
100 lbs.....lb. 1.30 - —
25-lb. lots.....lb. 1.45 - —
Sulfapyridine, powd., for hospitals, 5-gram bots..ea. .50 - —
Sulfathiazole, 5-gm., bot.....es. .42 - —
Sesquicarbonate, 5-gm. bot....ea. .42 - —
Sulphonethylmethane, kgs.....lb. 6.75 - 6.80
Sulphonmethane, kgs.....lb. 5.25 - —
Sulphur, crude, bulk, f.o.b. cars, mines, contracts..long ton.16.00 - —
f.o.b. steamers, Gulf ports, contract..long ton.17.50 - —
flowers, USP, bgs., c.l..100 lbs. 3.05 - —
l.c.l. .....100 lbs. 3.55 - —
bbls., c.l.....100 lbs. 3.40 - —
l.c.l. .....100 lbs. 3.90 - —
flour, comm'l bgs., c.l..100 lbs. 1.65 - —
l.c.l. .....100 lbs. 2.15 - —
Sulphur, refined, cast, bgs., c.l. 100 lbs. 2.20 - —
l.c.l. .....100 lbs. 2.70 - —
heavy, USP, bgs., c.l..100 lbs. 2.60 - —
l.c.l .....100 lbs. 3.10 - —
bbls., c.l.....100 lbs. 2.95 - —
l.c.l. .....100 lbs. 3.45 - —
light, USP, bgs., c.l..100 lbs. 2.70 - —
l.c.l. .....100 lbs. 3.20 - —
bbls., c.l.....100 lbs. 3.05 - —
l.c.l. .....100 lbs. 3.55 - —
lump, bgs., c.l.....100 lbs. 2.20 - —
l.c.l. .....100 lbs. 2.70 - —
bbls., c.l.....100 lbs. 2.55 - —
l.c.l. .....100 lbs. 3.05 - —
roll, bgs., c.l.....100 lbs. 2.40 - —
l.c.l. .....100 lbs. 2.90 - —
Prices at the mine for various grades refined sulphur 25c. less per 100 pounds.
Suppermakers, comm'l, 99½%, bgs., c.l., frt. alld..100 lbs. 2.05 - —
refined, 100%, bgs., c.l., frt. alld..100 lbs. 2.40 - —
Chloride, 55-gal. dms., c.l....lb. .03 - .03¼
l.c.l., dms., works....lb. .04 - .04¼
10-gal. dmg., c.l.....lb. .07 - .07¼
l.c.l. .....lb. .08 - .08¼
Dioxide, liquid, com'l., cyls., works..lb. .07 - .09
multi-unit, cars, works.lb. .04½- .07
tanks, works.....lb. .04 - .06
refrigeration, cyls., works..lb. .16 - .40
multi-unit cars, works..lb. .07½- .10
Iodide, bots., jars.....lb. 3.90 - 4.05
Precipitated, USP, bbls.....lb. .17 - .22
Sumac, grd., Sicilian, f.a.s...ton. No prices
leaf, f.a.s.....ton. No prices
extract, bbls., No. 1.. .....lb. .08 - —
No. 2.....lb. .07 - —
stainless, bbls.....lb. .09 - .11
Berries, bgs.....lb. .10 - .12
Sunflower seed, Calif., large bgs., lb. .06¾- .07¼
medium, bgs.....lb. .06 - .06½
poultry, Argentine.....lb. .05 - .05½
Superphosphate, run-of-pile, bulk, f.o.b. cars, boat, Balto..ton. 9.50 - —
guaranteed 16%, bulk, same basis..ton.10.00 - —
20%, bulk, same basis....ton.12.00 - —
triple, bulk, f.o.b. works....ton. No prices

T

Talc, dom., Calif., 1, c.l.....ton.20.00 - —
2, c.l.....ton.17.00 - —
N.Y., fibrous, 93-94%, 325 mesh, c.l..ton.14.00 -16.00
l.c.l. .....ton.16.00 -18.00
99-99½%, 325 mesh, c.l.... ton.15.25 -17.25
l.c.l. .....ton.17.25 -19.25
96-98%, 326 mesh, c.l..ton.15.00 -17.00
l.c.l. .....ton.17.00 -19.00
99.95%, 325 mesh, c.l..ton.17.00 -19.00
coarse, off-color, c.l....ton.11.00 -13.00
Aluminum, flake type, grd. c.l..ton.21.00 - —
l.c.l. .....ton.24.50 - —
Vermont, c.l.....ton.14.00 - —
l.c.l. .....ton.15.00 - —
imp., Canadian, c.l., dlvd. N. Y. ton.24.00 -30.00
French .....ton. No prices
Italian .....ton. No prices
Talc, domestic, is quoted at the mills in bag packing.
Tallow, extra, loose.....lb. .09 - —
special, loose.....lb. .08⅞- —
sulphonated, 85% (24% fat), dms., c.l..lb. .05 - —
l.c.l. .....lb. .06 - —
50% (43% fat), dms., c.l..lb. .06½- —
l.c.l. .....lb. .07½- —
50% (48% fat), dms., c.l..lb. .07 - —
l.c.l .....lb. .08 - —
Tamarind, No. 1, bbls.....lb. .03 - .07
kegs .....lb. 6.00 - 8.00
Tankage, fertilizer, animal, dom., grd., 9% ammon., 10% b.p.l., bulk, basis N.Y..unit-ton. 4.00 & .10
10-11% ammon., 15% b.p.l., bulk, basis Chi..unit-ton. 3.75 & .10
feeding, unground, 9-11% ammon., 15-20% b.p.l., bulk, basis N.Y..unit-ton. 4.50 & .10
high-grade, bulk, Chicago, unit-ton. 4.50 & .10
import, S. Amer., 10-12% ammon., 15% b.p.l., bulk, c.i.f. ports..unit-ton. 4.50 & .10
Tansy leaves, bls.....lb. .22 - .23
Tapioca flour, bgs.....lb. .04 - .06½
Tar acid oil, 15%, dms., c.l., works..gal. .22 - .24
l.c.l., same basis.....gal. .24 - .26
25%, dms., c.l., works.....gal. .25 - .27½
l.c.l., same basis.....gal. .27 - .29½
Tar, pine, retort, dms., dlvd. E. cities..gal. .29 - —
ports .....gal. .31 - —
tanks, dlvd. E. cities....gal. .22 - —
Tarragon herb, bgs.....lb. 1.50 Nom.
Tartar emetic, tech., nne gran. or powd., bbls., kgs., 5 or more..lb. .47¾- —
less than 5.....lb. .48 - —
dms. .....lb. .48½- .51
USP, powd., bbls.....lb. .52¾- .53
Terpinyl acetate, cns.....lb. .74 - —
dms. .....lb. .71 - —
Terpin hydrate, bbls., dms.....lb. .60 - .65
Terpineol, CP, cns.....lb. .36 - —
dms. .....lb. .33 - —
alpha, denat. grade, dms., c.l., wks., net wgt..lb. .17 - —
Terra alba (see Gypsum).
Tetrachloroethane, dms., wks..lb. .08 - .08½
Tetrachloroethylene, CP, dms..lb. .21½- — tech. (see Perchloroethylene).
Tetralin, dms.....lb. .19 - —
Tetrasodium pyrophosphate (see soda pyrosphosphate).
Thallium sulphate, 99% pure, bots., works..lb. 5.00 - 7.00
Theobromine, 5-lb. cns.....lb. No prices
Sodiosalicylate, dms.....lb. No prices
Thiamine hydrochloride, bots., cns., gram. .65 - .90
Thiocarbanilide, dms.....lb. .24 - —
Thio Urea, C.P., dms.....lb. .55 - .65
Thorium, nitrate, cs, works...lb. 2.00 - —
Thyme, French, bls.....lb. .76 - .78
Spanish, bls.....lb. .19 - .19½
Thymol, cns., 25 lbs.....lb. 2.35 - —
Iodide, kgs., 50 lbs.....lb. 3.40 - —
25 lbs.....lb. 3.50 - —
Timbo root (see cube root).
Tin chloride (ous), anhyd.....lb. .48 - .48½
Crystals, bbls., bgs.....lb. .39 - .39½
Metal,[3,4] Straits.....lb. .52 - —
Oxide, bbls.....lb. .55 - —
Tetrachloride, anhyd., bbls..lb. No price
Titanium, dioxide, bgs., c.l., (20 tons)..lb. .14½- —
l.c.l., 5 tons, single delivery, lb. .14⅝- —
1,000-9,999 lbs.....lb. .15 - —
50-999 lbs.....lb. .15¼- —
bbls., c.l. (20 tons).....lb. .14¾- —
l.c.l., 5 tons, single delivery, lb. .15 - —
1,000-9,999 lbs.....lb. .15¼- —
50-999 lbs.....lb. .15½- —
non-chalking, bgs., c.l. (20 tons)..lb. .16½- —
l.c.l., 5 tons, single delivery, lb. .16¾- —
1,000-9,999 lbs.....lb. .17 - —
50-999 lbs.....lb. .17¼- —
bbls., c.l. (20 tons).....lb. .16¾- —
l.c.l., 5 tons, single delivery..lb. .17 - —
1,000-9,999 lbs.....lb. 17⅛
50-999 lbs.....lb. .17½- —
chalk-resistant, bgs., c.l. (20 tons)..lb. .15 - —
l.c.l., 5 tons, single delivery, lb. .15¼- —
1,000-9,999 lbs.....lb. .15½- —
50-999 lbs.....lb. .15¾- —

Strolyl Acetate—Toluol

Titanium dioxide, chalk-resistant, bbls., c.l. (20 tons)..lb. .15 - —
l.c.l., 5 tons, single delivery, lb. .15½- —
1,000-9,999 lbs.....lb. .15¾- —
50-999 lbs.....lb. .16 - —
barium or magnesium base, bgs., c.l. (20 tons)..lb. .05¾- —
l.c.l. .....lb. .06 - —
bbls., c.l. (20 tons).....lb. .06 - —
l.c.l. .....lb. .06¼- —
calcium base, bgs., c.l. (20 tons), lb. .05½- —
calcium-rutile base, bgs., c.l. (20 tons)..lb. .05¼- —
l.c.l. .....lb. .05¾- —
bbls., c.l. (20 tons).....lb. .05¾- —
l.c.l. .....lb. .06 - —
bbls., c.l. (20 tons).....lb. .05¾- —
l.c.l. .....lb. .06 - —

Carload prices are f.o.b. factories with actual freight paid. Less than carload prices are f.o.b. factories or ex warehouse with actual freight or trucking paid, except on the Pacific Coast, where they are f.o.b. warehouses. Pacific Coast prices are ¼c. per lb. higher than the above.

Toluidin base, distilled, kgs....lb. .96 - —
Tolu, balsam, cns.....lb. .85 - .95
Toluidin, mixed, dms.....lb. .26 - —
Toluol[5], (toluene), 2° indus., dms., returnable..gal. .32 - —
tanks, E. of Omaha, frt. alld. gal. .27 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .27 - —

We use A FEW BILLION GALLONS OF WATER OURSELVES . . .

60th ANNIVERSARY 1881 • 1941

As you will note by the "Anchor" seal, this is Solvay's 60th Anniversary. That means that in 60 years we have had to find out a lot about water and its characteristics . . . for the plain reason that our own manufacturing processes require the use of millions of gallons yearly.

Our business also takes us into many manufacturing fields where the relation between water and alkalies is extremely important to manufacturers' processes. We make, for instance, cleansers of various types for a variety of industries, which, in itself, requires a broad knowledge and experience of water conditions in every section of the country.

As manufacturers of Liquid Chlorine and Alkalies, used in both municipal and industrial water treatment, we have for years been in direct contact with water treating problems.

Much of this accumulated experience in the field of water treating can be yours merely for the asking. And with such a background, we do not feel it too much to say that water treating problems, whatever their nature, are "right down the alley" of Solvay Technical Service. Your inquiries are cordially solicited.

SOLVAY
TRADE MARK REG. U. S. PAT. OFF.
TECHNICAL SERVICE

SOLVAY SALES CORPORATION
Alkalies and Chemical Products Manufactured by The Solvay Process Company
40 RECTOR STREET NEW YORK, N. Y.
BRANCH SALES OFFICES:
Boston • Charlotte • Chicago • Cincinnati • Cleveland • Detroit
New Orleans • New York • Philadelphia • Pittsburgh • St. Louis • Syracuse
Plants Located At:
Syracuse, N. Y. • Detroit, Mich. • Baton Rouge, La. • Hopewell, Va.

Toluol—Whiting

Toluol, 1° nitration, dms., returnable..gal. .33½- —
tanks, E. of Omaha, frt. alld..gal. .28½- —
W. Coast, f.o.b. Minnequa, Col..gal. .28½- —
Tonga vine, F, bls.....lb. .65 - .70
root, bls.....lb. .65 - .70
Tonka beans, Angostura, cks..lb. 2.40 - 2.50
Brazilian, Surinam, cs.....lb. .70 - .85
Triacetin, dms.....lb. .26 - —
Trimyl borate, dms., l.c.l., works.lb. .27 - —
Triamylamine, l.c.l., works....lb. .90 - —
Tributylamine, l.c.l., dms., works.lb. .70 - —
Tributyl citrate, ton lots, 475-lb. dms..lb. .24 - —
smaller lots.....lb. .32 - —
Phosphate, dms., l.c.l., dlvd..lb. .47 - —
cns., works.....lb. .51 - —
Trichlorobenzene, dms., c.l., frt. alld..lb. .08 - —
l.c.l., same basis.....lb. .08½- —
tanks.....lb. .07½- —
Trichloroethylene, dms., c.l., works., frt. alld., Zone 1..lb. .08 - —
l.c.l., same basis.....lb. .08½- —
Zone 2, dms., c.l., works, frt. alld..lb. .08½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock points..lb. .09 - —
l.c.l., same basis.....lb. .09½- —

All prices on trichlorethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following States:—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City, N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla. and Fla. Zone 3 includes Colo., N. M., Wyo, Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Idaho, Ore., Nev., Wash., Utah and Cal.

Tricresyl, phosphate,[2] CP, cns., dlvd..lb. .40½- .51½
dms., c.l., dlvd.....lb. .37½- —
Tech., dms., c.l.....lb. .25 - —
500 lbs., dms.....lb. .25½- —
Triethanolamine, dms., c.l., works.lb. .19 - —
l.c.l., works.....lb. .20 - —
tanks, works.....lb. .18 - —
Triethylamine, dms., l.c.l., works.lb. 1.05 - —
Triethyl citrate, ton lots, 500-lb. dms..lb. .24 - —
smaller lots.....lb. .32 - —
Triethyl phosphate, dms., dlvd..lb. .45 - —
Triethyleneglycol, dms., l.c.l., works..lb. .26 - —
Trimethyl phosphate, cns.....lb. .54 - .56
dms., dlvd.....lb. .50 - —
Trimethylamine, dms., c.l., dlvd.lb. .85 - —
l.c.l., dlvd.....lb. .90 - —
Triphenyl phosphate[2], dms....lb. .88 - —
Tripoli, air-floated, bgs., c.l., works..ton.26.00 - —
double grd., bgs., c.l., works.ton.16.00 - —
once-grd., bgs., c.l., works.ton.14.50 - —
Trisodium phosphate (see Soda phosphate, tribasic).
Tuba root (see Derris root).
Tungsten metal powd.,[2,3] 90%, dms., works..lb. No prices
Oxide, CP, kgs.....lb. No prices
Chem. grade, kgs.....lb. No prices
Turmeric root, Alleppey, bgs..lb. .09¾- —
Madras, bgs.....lb. .08¾- .09
Turpentine, spirits, gum, bbls., c.l., ex dock..gal. .82 - —
l.c.l., 10 ex dock.....gal. .84 - —
5 ex dock.....lb. .86 - —
wood, dest., dist., dms., dlvd. E. ports..gal. .62 - .65
tanks, dlvd., E. cities...gal. .55 - —
steam-dist., dms., c.l., dlvd.gal. .80 - —
l.c.l., dlvd.....gal. .83 - —
tanks, dlvd.....gal. .75 - —

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Uranium oxide, black, bgs....lb. 2.55 - —
yellow, kgs.....lb. 1.65 - —
Urea, dom., 46% N., bgs., 20 tons, f.o.b. Belle, W. Va., Metropolitan New York, Phila., Wilmington, Del., Baltimore, Wilmington, N. C., Charleston, Savannah, Jacksonville....ton.80.00 - —
l.c.l., f.o.b. Belle, W. Va. ton.82.50 - —
5-19 tons, f.o.b. Boston, New York, Philadelphia, Wilmington, Del., Baltimore..ton.85.00 - —
less than 5 tons, f.o.b. New York, Phila..ton.90.00 - —
Import, 40% N., bgs., 5 tons, f.o.b. Atl., Gulf ports or Belle, W. Va., ship..ton. No prices
smaller lots, f.o.b. N. Y. whse..ton. No prices
pure, cs.....lb. .12 - —
Urea fertilizer compound, basis 42% N., bulk, c.l., f.o.b. Belle, W. Va., or Atl., Gulf ports..ton.57.40 - —
Urea-ammonia liquor, basis, 45% N., tanks, f.o.b. Belle, W. Va., or Atl., Gulf ports, ton.121.58 - —
37% N. (insoluble), f.o.b. Belle, W. Va., or Atl., Gulf ports. ton.127.00 - —
Uva ursi leaves, bls.....lb. .18 - .20

V

Valerian root, Belgian, bls....lb. .95 - 1.00
Eastern, bls.....lb. .60 - .65
Valonia, beards, bgs., f.a.s...ton. No prices
cups, bgs., f.a.s.....ton. No prices
Vanadium pentoxide, C.P., bgs., cns., works..lb. 7.00 - —
tech., dms., works.....lb. 1.10 - —
Vanilla beans, Bourbon, to arrive, tins..lb. 9.50 -10.00
Mexican, tins.....lb.13.00 -14.00
cuts, tins.....lb.12.00 -13.00
South American, tins.....lb. No prices
Tahiti, tins.....lb. 5.75 - 6.00
Vanillin, ex eugenol, 25-lb. tins, lb. 2.60 - —
5-lb. tins.....lb. 2.65 - —
1-lb. tins.....lb. 2.75 - —
ex guaiacol, 25-lb. tins.....lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.50 - —
ex lignin, any quantity, 25-lb. tins..lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.55 - —
Venice turpentine, true, cs....lb. 1.75 - 2.00
Verdigris, bbls., kgs.....lb. .22 - .23
Vinyl acetate, cns., works.....lb. .25 - —
dms., c.l., 30,000 lbs. gross, works..lb. .14 - —
l.c.l., works.....lb. .15 - —
5 gals. dms., works.....lb. .25 - —
Ether, 75 c.c.....bot. 1.30 - —
50 c.c.....bot. .73½- —
25 c.c.....bot. .45½- —
Violet, methyl, toner (see M).
V.M.P. naphtha (see petroleum naphtha, v.m.p.).

W

Wahoo bark, bls.....lb. .40 - .41
tree.....lb. .19 - .22
Wattle bark, bgs., f.a.s.....ton.41.00 -43.00
Extract, solid, bgs.....lb. .0460- .04475
liquid, tanks.....lb. .05 - —
bbls.....lb. .05¾- —
Wax, amorphous, group 3, at refineries: 160-165, amber. lb. .15½- —
black.....lb. .14 - —
white.....lb. .26 - —
180-185, amber.....lb. .17½- —
black.....lb. .16 - —
white.....lb. .30 - —
Wax, bayberry, bgs.....lb. .18 - .20
Bees, white, bleach, slabs, cs., lb. .56 - —
cake, cs.....lb. .57 - —
discs, cs.....lb. .58 - —
yellow, crude, Africa, 10-bg. lot..lb. No stocks
1 bg.....lb. No stocks
Brazil, bgs.....lb. No stocks
refd., slabs, cs., lbs.....lb. .51 - .52
Candelilla, bgs., 1 ton.....lb. .30 - .32
jobbing lots.....lb. .31 - .33
Carnauba, No. 3, chalky, bgs., 1 ton..lb. .74 - .76
5 bgs.....lb. .74½- .76½
1 bg.....lb. .75 - .77
N. C., 3, bgs., 1 ton.....lb. .78 - .79
5 bgs.....lb. .78½- .79½
1 bg.....lb. .79 - .80
refined, bgs.....lb. .84 - .85
yellow, No. 1, bgs., ton....lb. .86 - .87
5 bgs.....lb. .86½- .88
1 bg.....lb. .87 - .88
No. 2, bgs.....lb. .84 - .85
Ceresin, dom., 138°, 140° m.p., bgs., 1 ton..lb. .12½- .13
jobbing lots.....lb. .13½- .14
150°-160° m.p., bgs., 1 ton..lb. .14½- .15
jobbing lots.....lb. .15½- .16
160° m.p., bgs., 1 ton.....lb. .15½- .16
jobbing lots.....lb. .16½- .17
Japan, cs.....lb. .30 - .31
Montan, bgs.....lb. .45 - .46
Ouricury, refined, bgs.....lb. .58 - .59
Ozokerite, hard, green, congeal, p. 66°-68° C., bgs..lb. No prices
70°-72° C., bgs.....lb. No prices
74°-76° C., bgs.....lb. No prices
Wax, ozokerite, snow-white, pure, 76°-78° C., bgs..lb. No prices
yellow, natural, 76°-78° C., bgs..lb. No prices
Paraffin (see P).
Spermaceti, blocks, cs.....lb. .24 - .25
cakes, cs.....lb. .25 - .26
White lead (see Lead, white).
White pine bark, rossed, bls..lb. .07 - .08
White precipitate, powd., dms., 50 lbs. or more..lb. 2.84 - —
Whiting, chalk, com'l., dry-grd., pap. bgs., c.l., works, ton.18.00 -22.00
l.c.l., works.....ton.20.00 -24.00
wet-grd. bip. bgs., c.l., works..ton.21.00 -25.00
l.c.l., works.....ton.22.00 -27.00
gilders, bolted, pap. bgs., c.l., works..ton.20.00 -24.00
l.c.l., works.....ton.21.00 -24.00
extra bolted, pap. bgs., c.l., works..ton.22.00 -26.00
l.c.l., works.....ton.23.00 -27.00
Paris white, pap. bgs., c.l., works..ton.24.00 -28.00
l.c.l., works.....ton.25.00 -29.00
Limestone, air-floated, 99¾%, 250 mesh, pap. bgs., c.l., works..ton.10.10 - —
200 mesh, pap. bgs., c.l., works..ton. 9.50 - —
90%, 200 mesh, pap. bgs., c.l., works..ton. 7.00 - —
gilders, pap. bgs., c.l., works..ton.11.50 -13.00
l.c.l., works.....ton.12.50 -16.00
putty grade, water-floated, bgs., c.l., works..ton.12.00 -13.00
l.c.l., works.....ton.13.00 -16.00
precipitated, bgs., c.l., works, ton.14.00 -15.00
l.c.l., works.....ton.18.00 -25.00

INSIDE NEWS

NOVEMBER PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1941

"Back Stage" with National's New Research Department

You are invited "Back Stage" of National's new Research Department. Since we realize you can't all visit our Laboratories personally, we are going to present certain problems which will give you an idea of how they are handled through Research.

The first consideration in the manufacture of a can, is the material from which it is made. The wrong type of plate may give rise to many problems. Therefore, let us consider one of these.

THE CAN ENDS:

At first thought, the can end may appear to be so simple that no problems could arise in either its manufacture or use. It is simple, if we only consider one of its functions; that of acting as part of the wall of a container. But the can end is not merely a static, rigid, wall, for it is also a pressure relieving diaphragm; distending under pressure and returning to its normal shape when the strain is relaxed. It is in this action that an end must successfully withstand some severe stresses. Therefore, the problem of determining the best possible combination of design and materials so that the optimum of performance can be attained arises. In addition, it must be solved within the economic limits of low selling cost.

The question is, how to select the best possible combination of materials and design? It's not determined by guess-work.

Every end needs material of the right kind which consists of tin plate. This must be the best available, which means Cold Reduced Plate of the proper gauge and temper.

Now, there are many sizes of ends, and it is simple to see that the same design, temper, and gauge of plate, cannot be used on all sizes from the smallest to the large gallon size.

The selection of the proper combination is not left to guess-work, or even practical experience. Research has devised tests which provide facts, and for the selection of the proper combination of design and material, the apparatus pictured at right has been devised. (21)

The operator merely places a can in the apparatus and applies steam pressure to the end. Watching the end for signs of breakdown as the pressure increases. When a definite pressure level has been reached the operator turns off the steam, releases the pressure and applies a vacuum. This is repeated at many different pressure levels until the characteristics of this end are thoroughly understood. This data, in combination with other correlated data enables him to select the proper combinations to give optimum end performance.

Crabmeat Industry To Expand Production

America's crabmeat canning industry is planning an expansion of production facilities. The industry is acting to take advantage of the market created in America by the new tariff on imported crabmeat, the tariff now being 22½ percent ad valorem as compared to 15 percent previously.

The industry feels that this additional protection will permit it to develop rapidly.

The largest supply of crabs available to American canners is found along the Gulf Coast and along the Atlantic Coast up to Long Island. However, canners in Maine are planning greatly increased outputs. During the past year these food companies confined their merchandising efforts on canned crabmeat to New England, but they now intend

(Advertisement)

Wild cherry bark, thick, natural, bls..lb. .07 - .08
rossed, bls.....lb. .05 - .06
thin, natural, bls.....lb. .07 - .08
rossed, green, bls.....lb. .10 - .11
Wild indigo root, bls.....lb. .13 - .14
Witch-hazel extract, dist., NF, tax extra, bbls..gal. .44 - .45
leaves, bls.....lb. .07 - .09
Witherite (see Barium carbonate, natural).
Woodflour, dom., 60 mesh, bgs., c.l., f.o.b. N.Y..ton.24.00 -25.00
80 mesh, same basis.....ton.26.00 -28.00
100 mesh, same basis.....ton.30.00 -32.00
Import, 70 mesh, bgs., ex dock..ton. No prices
80 mesh, bgs., ex dock..ton. No prices
100 mesh, bgs., ex dock..ton. No prices
120 mesh, bgs.. ex dock..ton. No prices
Wormseed, American, bgs.....lb. .07 - .08
Levant, bgs.....lb. No prices
Wormwood, bls.....lb. .48 - .50

X

Xylol (xylene), indus., dms., returnable, works..gal. .31 - —
tanks, E. of Omaha, frt. alld., gal. .26 - —
tanks, W. of Coast, f.o.b. Minnequa, Colo..gal. .26 - —
10°, dms., returnable, works, gal. .34 - —
tanks, E. of Omaha, frt. alld., gal. .29 - —
5°, dms., returnable, works..gal. .41 - —
tanks, E. of Omaha, frt. alld., gal. .39 - —
3°, dms., returnable, works..gal. .48 - —
tanks, E. of Omaha, frt. alld., gal. .46 - —
Xylidin, mixed, dms.....lb. .35 - .36

Y

Yara yara, cryst., cns.....lb. 1.80 - 1.85
Yellow, arsenic sulphide, dom., bbls., f.o.b. New York..lb. .52 - .55
bottles, same basis.....lb. .60 - .64
imp., bbls., same basis.....lb. .20 Nom.
Yellow, cadmium, CP, import, bxs..lb. 1.35 - 1.40
lithopone, all shades, bbls., 1 ton, works, frt. alld..lb. .55 - —
smaller lots, same basis.lb. .60 - —
pkgs., ton lots, same basis, lb. .60 - —
smaller lots, same basis.lb. .65 - —
lb. .65 - —
Sulphide, orange, cases, works, lb. 1.10 Nom.
Chrome, CP, bbls., dlvd. No. of Tenn. and N. C., E. of Miss. R., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts..lb. .16 - —
Chrome yellow, CP prices are ¼c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Tex., (Dallas, 1¼c.; Ft. Worth, 1½c.; El Paso, 2c.). Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Dutch, pink, bbls.....lb. .09 - .11
Hansa, bbls., same basis chrome..lb. 1.37 - —
primrose shade, bbls., same basis chrome..lb. 1.75 - —
Yellow, mercury oxide, tech., bbls., 1,000 lbs..lb. 2.87 - —
smaller lots.....lb. 2.89 - —
Ocher, Amer., golden bbls., works..lb. .04½- .06¾
yellow, bbls., works....lb. .02 - .02¾
French type, bbls., c.l....lb. .0345- —
l.c.l. .....lb. .0365- —
French, all shades, cks., c.l., ex dock, Balto., Boston, N. Orleans for import..lb. .02475 Nom.
New York (f.o.b.)...lb. .02¾ Nom.
Philadelphia, for import..lb. .02¾ Nom.
San Pedro, San Francisco..lb. .0290 Nom.
l.c.l., ex dock, Balto. Boston, N. Orleans..lb. .02575 Nom.
New York.....lb. .02¾ Nom.
Phila., for import....lb. .02¾ Nom.
Portland, Seattle....lb. .03½ Nom.
San Pedro, S. Francisco..lb. .03 Nom.
ex whse., Balto., Boston, N. Orleans..lb. .02725 Nom.
Indianapolis, Kansas City, Milwaukee, St. Louis..lb. .03⅜ Nom.
New York.....lb. .03 Nom.
Pittsburgh .....lb. .03¼ Nom.
Portland, Seattle....lb. .03⅜ Nom.
San Pedro, San Francisco..lb. .03¼ Nom.
f.o.b. N.Y., from dock, lb. .02⅞ Nom.
from whse.....lb. .03½ Nom.
Oxide, nat., bbls., c.l., f.o.b. Bethlehem, Easton, N.Y...lb. .04½- —
l.c.l., same basis.....lb. .05 - —

Yellow oxide, synth., bbls., c.l., works..lb. .06¾- —
l.c.l., same basis.....lb. .07 - —
Persian orange (see O).
Zinc, bbls., same basis, chrome CP, contracts..lb. .17½- —
open order.....lb. .17½- —
Navy specifications type, contracts..lb. .17½- —
open order.....lb. .17½- —
Yellow dock root, dom., bls....lb. .15 - .20
Yellow root (xanthoriza), bls..lb. .11 - .13
Yerba santa leaves, bls.....lb. .10 - .11
Yohimbine hydrochloride, viz..oz. 3.00 - 4.25

Z

Zein, bgs., 1,000 lbs. or more, works..lb. .20 - —
less than 1,000 lbs., works..lb. .23 - —
Zinc,[1,2,5] Metal (see paint market).
acetate, tech., bbls., dlvd...lb. .13 - .16
USP, bbls., 250 lbs.....lb. .27 - —
kgs., 100 lbs.....lb. .29 - —
Zinc, arsenite, bgs., c.l., dealers, E. of Rockies..lb. .12 - —
l.c.l., bgs.....lb. .12½- —
Zinc arsenite prices are on a frt. alld. basis to dest., in lots of 96 lbs. or over.
Carbonate, tech., bbls.....lb. .14 - .20
USP, precip., powd., bbls..lb. .32½- —
25-lb. dms.....lb. .37½- —
kgs. .....lb. .34½- —
Chloride, tech., fused, dms., c.l., works..100 lbs. 5.00 - —
l.c.l., works.....100 lbs. 5.35 - —
gran., dms., c.l., works, 100 lbs. 5.75 - —
l.c.l., dms., works.100 lbs. 6.50 - —
USP, 100-lb. dms.....lb. .30 - .31
25-lb. jars.....lb. .36 - —
solut., 50%, dms., c.l., works, lb. .0315- —
l.c.l., works.....lb. .04¼- .04½
tanks, works.....lb. .0250- —
Cyanide, kgs., works.....lb. .33 - .37
Dust, bbls., c.l., dlvd.....lb. .1035- —
l.c.l., bbls., f.o.b. works...lb. .1135- —
Iodide, N. F., bots.....lb. 4.54 - —
jars .....lb. 4.40 - —
Fluoride, bbls.....lb. .20 - .25
Metal (see daily quotations in Market report.)
Oxide, pigment, dom., Amer. process, comⁿl, lead free, bgs., c.l., dlvd..lb. .06½- —
l.c.l., dlvd.....lb. .06¾- —
bbls., c.l., dlvd....lb. .06¾- —
l.c.l., dlvd.....lb. .07 - —
leaded, 5%, bgs., c.l., dlvd..lb. .06¾- —
l.c.l., dlvd.....lb. .06¾- —
bbls., c.l., dlvd....lb. .06¾- —
l.c.l., dlvd.....lb. .06⅞- —
35%, bgs., c.l., dlvd...lb. .06 - —
l.c.l., dlvd.....lb. .06¼- —
bbls., c.l., dlvd....lb. .06¼- —
l.c.l., dlvd.....lb. .06½- —
50%, bgs., c.l., dlvd...lb. .06 - —
l.c.l., dlvd.....lb. .06¼- —
bbls., c.l., dlvd....lb. .06¼- —
l.c.l., dlvd.....lb. .06½- —
French process, comⁿl, lead free, bgs., c.l., dlvd..lb. .06½- —
l.c.l., dlvd..lb. .06¾- —
bbls., c.l., dlvd..lb. .06¾- —
l.c.l., dlvd..lb. .07 - —
green seal, bgs., c.l., dlvd. lb. .08¼- —
l.c.l., dlvd.....lb. .08½- —
bbls., c.l., dlvd..lb. .08½- —
l.c.l., dlvd.....lb. .08¾- —
red seal, bgs., c.l., dlvd. lb. .07¾- —
l.c.l., dlvd.....lb. .08 - —
bbls., c.l., dlvd.lb. .08 - —
l.c.l., dlvd.....lb. .08¼- —
white seal, bgs., c.l., dlvd. lb. .08¾- —
l.c.l., dlvd.....lb. .09 - —
bbls., c.l., dlvd..lb. .09 - —
l.c.l., dlvd.....lb. .09½- —
imported, gold seal, cks., ex whse..lb. No prices
green seal, bbls., ex whse. lb. No prices
white seal, cks., ex whse..lb. No prices
USP, l.c.l., 50-lb. ctns., 50-lb. dms..lb. .10 - —

Lead-free and 5% and 35% leaded zinc oxide in car lots are ½c. per lb. higher delivered Pac. Cst., and in less car lots are ½c. per lb. higher ex whse. Pac Cst.; 50% leaded is 5.6c. per lb. higher for car lots delivered Pac. Cst.

Palmitate, bbls.....lb. .24½- .27½
Resinate, fused, pale, bbls...lb. .10 - —
precip., dms., dlvd.....lb. .15 - —
Stearate, tech., precip., bbls., ctns., one ton..lb. .27 - —
smaller lots.....lb. .28 - —
USP, bbls.....lb. .30 - .31
Sulphate, cryst., bgs., c.l., 100 lbs. 3.40 - —
l.c.l. .....100 lbs. 4.15 - —
bbls., c.l.....100 lbs. 3.65 - —
l.c.l. .....100 lbs. 4.40 - —
flake, bgs., c.l.....100 lbs. 3.80 - —
l.c.l. .....100 lbs. 4.55 - —
bbls., c.l.....100 lbs. 4.05 - —
l.c.l. .....100 lbs. 4.50 - —
powd., bgs., c.l.....100 lbs. 5.35 - —
100 lbs. 5.35 - —
l.c.l. .....100 lbs. 6.10 - —
bbls., c.l.....100 lbs. 5.60 - —
l.c.l. .....100 lbs. 6.35 - —
Sulphide, bgs., c.l. (20 tons), dlvd..lb. .07¾- —
l.c.l., dlvd.....lb. .08 - —
bbls., c.l., 20 bbls., c.l. (20 tons), dlvd..lb. .08 - —
l.c.l., dlvd.....lb. .08¼- —
barium, pigment, bgs., c.l., dlvd..lb. .05¾- —
l.c.l., dlvd.....lb. .06¼- —
Calcium pigment, bgs., c.l., dlvd..lb. .05¼- —
l.c.l., dlvd.....lb. .05½- —
magnesium pigment, bgs., c.l., dlvd..lb. .05½- —
l.c.l., dlvd.....lb. .06½- —

Car lot prices are ½c. higher delivered Pac. Cst. and less car lot prices are ½c. higher ex whse. Pac. Cst.

Sulphocarbolate, NF, bbls., dms..lb. .24 - .29
Zinc-ammonia chloride, dms., c.l., works..100 lbs. 5.65 - —
l.c.l., works.....100 lbs. 6.70 - —
Zinc-iron oxide, pigment, bgs., c.l., dlvd..lb. .05¼- —
l.c.l., dlvd., except Pac. cst..lb. .05¾- —
ex whse., Pac. cst..lb. .05¾- —
Zirconium nitrate, kgs., works.lb. 3.00 - 4.00
Oxide, crude, 70-75%, gr., bbls., works..ton.75.00 -100.00
white, 98%, grd., kgs., works, lb. 1.80 - 2.00

BY NATIONAL CAN

NOVEMBER PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1941

to go after the national market. One canner has increased the personnel in its plant from 20 to 135 workers in the last year, and 50 more have been employed to pick the crabmeat from the shells.

The American crabmeat industry in 1940 produced 775,671 lb. and it is estimated that the 1941 figure will be up to 1,000,000 lb. However, the industry feels that production must be stepped up to 6,000,000 lb. or more to capture the new market in America. The raw supply of this increase is available, the capital can be obtained and technical knowledge has been developed so that the desired increase in volume is quite within the realms of possibility.

Formerly nearly all the canned crabmeat used in this country came from Japan, Russia and California. (22)

New Wax Source

Green cotton, said to yield 30 times as much wax as the ordinary white varieties, gives promise of becoming an important source of wax for polishes. Manufacturers of furniture polishes, floor polishes, auto polishes and similar protective finishes requiring a wax with a high melting point would benefit chiefly from the use of the new material, especially in case of an acute shortage of wax from the usual sources. Southern cotton farmers would find an always welcome new market for their crop. (23)

New Food Plant Bacteria Test

Need for a rapid and reliable method for determining the bacterial contamination on flat surfaces in food plants, has led the New York State Agricultural Experiment Station at Geneva, to devise a simple procedure for this purpose.

The method is called the "contact plate" method and is said to require a minimum of time and equipment and to be more practical for field use than any other method available.

Briefly, the contact plate method consists of allowing a layer of agar to harden on a sterilized tin disk resting in a sterilized Petri dish. When ready for use, the tin disk with its agar coating may be removed from the Petri dish with the aid of a small suction cup, the sterile agar brought into contact with the surface to be examined, the contact plate then replaced in the Petri dish and incubated at 32 deg. C for 24 to 48 hours, depending upon the type and number of bacterial colonies which develop.

Not only has the method proved useful in routine sanitary inspection work, but it is also serving as a valuable means for comparing different procedures for sterilizing food dispensing and food processing utensils. (24)

Shark Oil . . . A Vitamin Source

Sharks are generally considered predatory and useless denizens of the sea but scientists declare they are a boon to humanity. Recently Governor Olson, of California, signed a measure designed to protect this fish in California waters, vitamin A being the answer. For about five years the California Packing Corporation has been making a study of the shark and its habits. Little has been learned of its habits, but it has been found that shark liver oil is one of the best sources of vitamin A. Shark liver carries far more unit potency of vitamin A than does the better known cod liver or halibut liver. The latter two produce fractional units of a gram, while the liver of the shark has a potency of from 10 to 20 units. Soupfin shark liver has zoomed to new heights in price in Pacific Coast fishing centers and quite a few boats are out after sharks instead of food fish. At Astoria, Ore. soupfin shark liver is now quoted at $17,000 a ton, or more than the price of bar silver. (25)

A green copper paint was recently introduced by a large American copper producer to supplement its regular copper paint, which has been on the market for some time. (33)

Baltimore plant of The National Can Corporation

Technical Topics

A RESEARCH LABORATORY has reported an improved method of taking the yellow plant color, particularly carotene, out of white flour by using chlorine dioxide, a new gas to be used for flour bleaching; nitrogen trichloride aided by benzoyl peroxide is the commonly used gas. (26)

A U. S. PATENT has recently been procured covering the mechanical bunching of just enough stalks of asparagus to be mechanically inserted into a can without damage to tips; butts are cut off after bunch has been formed. (27)

EDIBLE OIL AND RICE FLOUR heated with addition of water may be used as a plasticising agent in cheese processing according to a recent patent. (28)

BIOTIN (VITAMIN H) essential to plant and animal life and found in potatoes, potato starches, milk, liver, yeast and egg yolks, has been isolated and is now under study for synthesizing by research workers according to a recent report. (29)

WILD ROSEHIPS and other hedgerow products are being suggested as a valuable source of vitamin C in Britain. It is intended to encourage their use during the coming autumn. (30)

CHLORINATION of channel blacks at elevated temperatures, so that the resulting material contains from 5 to 20 percent of chlorine is claimed to result in a product giving improved physical properties to rubber in which it is incorporated. Higher tensile strength, greater resistance to abrasion, and less development of heat on flexing are among the improvements said to result. (31)

SHELLAC modified with formaldehyde, urea, melamine, and similar materials, can be worked by the usual hot plastic molding technique, it has been shown in recent investigations by the Indian Lac Research Institute. It has also been found that shellac modified with formaldehyde and guanidine carbonate, and filled with jute waste can be injection molded. The heat resistance of the modified shellac molded articles is stated to be about 90°C. By gradual after-baking the resistance can be raised to 120°C. and more, it is added. (32)

For further information on any of these articles write to National Can Corp., 110 E. 42nd Street, New York City.

(Advertisement)

Abalyn—Neville Resin

Synthetic Resins
and other
Branded Paint Materials
(Manufacturers' List Prices)

A

Abalyn (methyl abietate), c.l., dms., f.o.b. cars, destination, zone 1..lb.	**.07½-**	**—**
l.c.l., lots of 10 dms., same basis..lb.	**.08¾-**	**—**
single dms., same basis....lb.	**.09¾-**	**—**
smaller lots, f.o.b. Hercules, Del..lb.	**.14¾-**	**—**
Arcolors, distilled, dms., c.l., works..lb.	**.23**	**- —**
ton lots, works.....lb.	**.25**	**- —**
single dms., works.....lb.	**.27**	**- —**
undistilled, dms., c.l., works, lb.	**.18**	**- —**
ton lots, works.....lb.	**.20**	**- —**
single dms., works.....lb.	**.22**	**- —**

B

Bakelite, alkyd resins, BR, 10025, bbls., 30,000 lbs., works, lb.	**.28**	**- —**
15,000 lbs., works.....lb.	**.28½-**	**—**
5,000 lbs., works.....lb.	**.29**	**- —**
carbic anhydride base, oil modified, BR, 13630, dms., 30,000 lbs., works..lb.	.27	- —
15,000 lbs., works.....lb.	**.27½-**	**—**
5,000 lbs., works.....lb.	**.28**	**- —**
14590, 30,000 lbs., works..lb.	**.26**	**- —**
15,000 lbs., works.....lb.	**.26½-**	**—**
5,000 lbs., works.....lb.	**.27**	**- —**
resin modified, BR, 13202, bbls., 30,000 lbs., works..lb.	**.15**	**- —**
15,000 lbs., works.....lb.	**.15½-**	**—**
5,000 lbs., works.....lb.	**.16**	**- —**
dispersion resin, BK, 2902 dms., 30,000 lbs., works..lb.	.2770-	—
15,000 lbs., works.....lb.	.2820-	—
5,000 lbs., works.....lb.	.2870-	—
6791, dms., 30,000 lbs., works, lb.	**.28½-**	**—**
15,000 lbs., works.....lb.	.29	- —
5,000 lbs., works.....lb.	.29½-	—
XK, 14504, dms., 30,000 lbs., works..lb.	.28	- —
15,000 lbs., works.....lb.	**.28½-**	**—**
5,000 lbs., works.....lb.	**.29**	**- —**
15346, dms., 30,000 lbs., works..lb.	.2810-	—
15,000 lbs., works.....lb.	.2860-	—
5,000 lbs., works.....lb.	.2910-	—

Products that may be damaged by the absorption of moisture find protection in Bemis Waterproof Bags. There have been instances when products in these superior shipping containers have gone through floods undamaged.

In addition to keeping dampness out, Bemis Waterproof Bags can be made to keep moisture in—retain desirable aromas and repel objectionable odors—shut out dust and dirt—resist acids and grease. And because of their strength and toughness, Bemis Waterproof Bags provide extra protection against rough handling.

WATERPROOF DEPARTMENT

BEMIS BRO. BAG CO.

ST. LOUIS, MO. • BROOKLYN, N. Y.

Bakelite, lacquer, BR, 9336, dms., 30,000 lbs., works..lb.	.18½-	—
15,000 lbs., works.....lb.	**.19**	**- —**
5,000 lbs., works.....lb.	**.19½-**	**—**
BJ, 15408 dms., 30,000 lbs., works..lb.	**.24**	**- —**
15,000 lbs., works.....lb.	**.24½-**	**—**
5,000 lbs., works.....lb.	**.25**	**- —**
XJ, 10433, dms., 30,000 lbs., works..lb.	**.37**	**- —**
15,000 lbs., works.....lb.	**.37½-**	**—**
5,000 lbs., works.....lb.	**.38**	**- —**
XR, 3180, dms., 30,000 lbs., lb.	**.45**	**- —**
15,000 lbs., works.....lb.	**.45½-**	**—**
5,000 lbs., works.....lb.	**.46**	**- —**
4331, dms., 30,000 lbs., works..lb.	**.45**	**- —**
15,000 lbs., works.....lb.	**.45½-**	**—**
5,000 lbs., works.....lb.	**.46**	**- —**
phenolic, 100%, BR, 254, bbls., 30,000 lbs., works..lb.	**.42**	**- —**
15,000 lbs., works.....lb.	**.42½-**	**—**
5,000 lbs., works.....lb.	**.43**	**- —**
3360, bbls., 30,000 lbs., works..lb.	**.36**	**- —**
15,000 lbs., works.....lb.	**.36½-**	**—**
5,000 lbs., works.....lb.	**.37**	**- —**
4036, bbls., 30,000 lbs., works..lb.	**.37**	**- —**
15,000 lbs., works.....lb.	**.37½-**	**—**
5,000 lbs., works.....lb.	**.38**	**- —**
9432, bbls., 30,000 lbs., works..lb.	**.31**	**- —**
15,000 lbs., works.....lb.	**.31½-**	**—**
5,000 lbs., works.....lb.	**.32**	**- —**
9434, bbls., 30,000 lbs., works..lb.	**.29**	**- —**
15,000 lbs., works.....lb.	**.29½**	**—**
5,000 lbs., works.....lb.	**.21**	**- —**
10282, bbls., 30,000 lbs., works..lb.	.32	- —
15,000 lbs., works.....lb.	**.32½-**	**—**
5,000 lbs., works.....lb.	**.33**	**- —**
14634, bbls., 30,000 lbs., works..lb.	**.30**	**- —**
15,000 lbs., works.....lb.	**.30½-**	**—**
5,000 lbs., works.....lb.	**.31**	**- —**
oil modified, BR, 302, bbls., 30,000 lbs., works..lb.	.3460-	—
15,000 lbs., works.....lb.	.3510-	—
5,000 lbs., works.....lb.	.3560-	—
2175, cns., 30,000 lbs., works..lb.	**.36**	**- —**
15,000 lbs., works.....lb.	**.36½-**	**—**
5,000 lbs., works.....lb.	**.37**	**- —**
resin, BR., 2963, bbls., 30,000 lbs., works..lb.	**.22**	**- —**
15,000 lbs., works.....lb.	**.22½-**	**—**
5,000 lbs., works.....lb.	**.23**	**- —**
11504, bbls., 30,000 lbs., works..lb.	**.18**	**- —**
15,000 lbs., works.....lb.	**.18½-**	**—**
5,000 lbs., works.....lb.	**.19**	**- —**
11544, bbls., 30,000 lbs., works..lb.	**.18**	**- —**
15,000 lbs., works.....lb.	**.18½-**	**—**
5,000 lbs., works.....lb.	**.19**	**- —**
solutions, XJ, 180, dms., 30,000 lbs., works..lb.	.2170-	—
15,000 lbs., works.....lb.	.2220-	—
5,000 lbs., works.....lb.	.2270-	—
13574, bbls., 30,000 lbs., works..lb.	**.30**	**- —**
15,000 lbs., works.....lb.	**.30½-**	**—**
5,000 lbs., works.....lb.	**.31**	**- —**

C

Copene resin, dms., works.....lb.	.30	- —
Cumar, AX.....lb.	.06½-	—
BX.....lb.	.06¾-	—
CX, gross weight.....lb.	.05½-	—
DX, gross weight.....lb.	.05	- —
EX, gross weight.....lb.	.05	- —
FX, gross weight.....lb.	.05½-	—
MH col. 1.....lb.	.11½-	—
1½-2.....lb.	.10½-	—
2½-3½.....lb.	.09½-	—
9.....lb.	.06½-	—
MS.....lb.	.10½-	—
P 10°-90° C., col. 2½ and darker..lb.	**.10½-**	**—**
RH.....lb.	.10½-	—
RS.....lb.	.10½-	—
V col. ½.....lb.	.12½-	—
1.....lb.	.11½-	—
1½-2.....lb.	.10½-	—
2½ and darker.....lb.	.09½-	—
W col. ½.....lb.	.13½-	—
1.....lb.	.12½-	—
1½-2.....lb.	.11½-	—
2½ and darker.....lb.	.10½-	—

Cumar resins are delivered f.o.b. Frankford, Pa., freight equalized with Pittsburgh; prices on contract are ¼c. per pound lower.

D

Durite, 1301, pale, one drum and over..lb.	**.29**	**- —**
smaller lots.....lb.	**.30**	**- —**

Durite prices are f.o.b. Phila., Pa., with freight allowed east of Rocky Mts.

E

Esterol, alkyd solution, A, c.l., dlvd..lb.	**.14½-**	**—**
10 dms. or more, dlvd....lb.	**.15**	**- —**
9 dms. or less, dlvd....lb.	**.15½-**	**—**
B, c.l., dlvd.....lb.	**.14**	**- —**
10 dms. or more, dlvd....lb.	**.14½-**	**—**
9 dms. or less, dlvd....lb.	**.15**	**- —**
E, c.l., dlvd.....lb.	**.15**	**- —**
10 dms. or more, dlvd....lb.	**.15½-**	**—**
9 dms. or less, dlvd....lb.	**.16**	**- —**
H-1, c.l., dlvd.....lb.	**.18**	**- —**
10 dms. or more, dlvd....lb.	**.18½-**	**—**
9 dms. or less, dlvd....lb.	**.19**	**- —**
PV, c.l., dlvd.....lb.	**.15¾-**	**—**
10 dms. or more, dlvd....lb.	**.16¼-**	**—**
9 dms. or less, dlvd....lb.	**.16¾-**	**—**
11, c.l., dlvd.....lb.	**.15**	**- —**
10 dms. or more, dlvd....lb.	**.15½-**	**—**
9 dms. or less, dlvd....lb.	**.16**	**- —**
Esterol, alkyd solution, 22, c.l., dlvd..lb.	**.12**	**- —**
10 dms, or more, dlvd....lb.	**.12½-**	**—**
9 dms. or less, dlvd....lb.	**.13**	**- —**
22-B, c.l., dlvd.....lb.	**.09½-**	**—**
10 dms. or more, dlvd....lb.	.10	- —
9 dms. or less, dlvd....lb.	.10½-	—
33, c.l., dlvd.....lb.	.14½-	—
10 dms. or more, dlvd....lb.	.15	- —
9 dms. or less, dlvd....lb.	.15½-	—
44, c.l., dlvd.....lb.	.14	- —
10 dms. or more, dlvd....lb.	.14½-	—
9 dms. or less, dlvd....lb.	.15	- —
44-B, c.l., dlvd.....lb.	.14	- —
10 dms. or more, dlvd....lb.	.14½-	—
9 dms. or less, dlvd....lb.	.15	- —
55, c.l., dlvd.....lb.	.14½-	—
10 dms. or more, dlvd....lb.	.15	- —
9 dms. or less, dlvd....lb.	.15½-	—
562, c.l., dlvd.....lb.	.15½-	—
10 dms. or more. dlvd....lb.	.16	- —
9 dms. or less, dlvd....lb.	.16½-	—
640-N, c.l., dlvd.....lb.	.14½-	—
10 dms. or more, dlvd....lb.	.15	- —
9 dms. or less, dlvd....lb.	.15½-	—
660-N, c.l., dlvd.....lb.	.14	- —
10 dms. or more, dlvd....lb.	.14½-	—
9 dms. or less, dlvd....lb.	.15	- —
Esterol, 750, c.l., dlvd.....lb.	.17	- —
9 dms. or less, dlvd....lb.	.18	- —
830, c.l., dlvd.....lb.	.16	- —
10 dms. or more, dlvd....lb.	.16½-	—
9 dms. or less, dlvd....lb.	.17	- —
1800, c.l., dlvd.....lb.	.14½-	—
10 dms. or more, dlvd....lb.	.15	- —
9 dms. or less, dlvd....lb.	.15½-	—
1825, c.l., dlvd.....lb.	.16½-	—
10 dms. or more, dlvd....lb.	.17	- —
9 dms. or less, dlvd....lb.	.17½-	—
2185, c.l., dlvd.....lb.	.14	- —
10 dms. or more, dlvd....lb.	.14½-	—
9 dms. or less, dlvd....lb.	.15	- —
2195, c.l., dlvd.....lb.	.15	- —
10 dms., or more, dlvd....lb.	.15½-	—
9 dms., or less, dlvd....lb.	.16	- —
2600, c.l., dlvd.....lb.	.17	- —
10 dms. or more, dlvd....lb.	.17½-	—
9 dms. or less, dlvd....lb.	.18	- —
2633, c.l., dlvd. .....lb.	.13½-	—
10 dms. or more, dlvd....lb.	.14	- —
9 dms. or less, dlvd....lb.	.14½-	—
2728, c.l., dlvd.....lb.	.15	- —
10 dms. or more, dlvd....lb.	.15½-	—
9 dms. or less, dlvd....lb.	.16	- —
2775-BS, c.l., dlvd.....lb.	.14½-	—
10 dms. or more, dlvd....lb.	.15	- —
9 dms. or less, dlvd....lb.	.15½-	—

F

Flexalyn solution, dms., c.l., f.o.b. cars, destination, zone 1..lb.	**.12½-**	**—**
l.c.l., 10 dms., same basis..lb.	**.13¼-**	**—**
single dms., same basis..lb.	**.14¾-**	**—**
smaller lots, f.o.b. Hercules, Del..lb.	**.19¾-**	**—**

G

G, resin, dms., gross weight, works..lb.	**.08**	**- —**

G resin prices on contracts terminating Dec., 1941, are ¼c. per pound lower; Los Angeles and San Francisco ex warehouse, 3c. per pound extra.

2633, c.l., dlvd.....lb.	**.11½-**	**—**
Guai-a-pheno, 10-gal. cns., works, gal.	**2.57**	**- —**
5-gal. cns., works.....gal.	**2.62**	**- —**
1-gal. cns., works.....gal.	**2.82**	**- —**
dms., works.....gal.	**2.50**	**- —**

H

Hercolyn (hydrogenated methyl abietate), dms., c.l., f.o.b. cars, destination, zone 1..lb.	**.11¼-**	**—**
l.c.l., lots of 10, same basis, lb.	**.12¾-**	**—**
single dms., same basis...lb.	**.13¾-**	**—**
smaller lots, f.o.b. Hercules, Del..lb.	**.18¾-**	**—**

J

Jozite (see zinc-iron oxide pigment in regular price list above).		

K

Kadox (zinc oxide), black or red label, bgs., c.l., dlvd..lb.	**.06½-**	**—**
l.c.l., dlvd. E. of Rockies..lb.	**.06¾-**	**—**
Pac. coast, ex whse.....lb.	**.07¼-**	**—**
bbls., c.l., dlvd.....lb.	**.06¾-**	**—**
l.c.l., dlvd. E. of Rockies.lb.	**.07**	**- —**
Pac. coast, ex whse.....lb.	**.07½-**	**—**
No. 25, bgs., c.l., dlvd.....lb.	**.07¾-**	**—**
l.c.l., dlvd. E. of Rockies, lb.	**.08**	**- —**
Pac. coast, ex whse.....lb.	**.08¼-**	**—**
bbls., c.l., dlvd.....lb.	**.08**	**- —**
l.c.l., dlvd. E. of Rockies, lb.	**.08**	**- —**
Pac. coast, ex whse.....lb.	**.08¾-**	**—**

L

Lewisol resin, No. 1, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
2, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
2L, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
3, c.l.....lb.	**.18½-**	**—**
10 dms.....lb.	**.19½-**	**—**
1 dm.....lb.	**.20½-**	**—**
18, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
24, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
28, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
33, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
115, c.l.....lb.	**.14½-**	**—**
10 dms.....lb.	**.15**	**- —**
1 dm.....lb.	**.15½-**	**—**
125, c.l.....lb.	**.15**	**- —**
10 dms.....lb.	**.15½-**	**—**
1 dm.....lb.	**.16**	**- —**
303, c.l.....lb.	**.15½-**	**—**
10 dms.....lb.	**.16**	**- —**
1 dm.....lb.	**.16½-**	**—**
310, c.l.....lb.	**.17**	**- —**
10 dms.....lb.	**.17½-**	**—**
1 dm.....lb.	**.18**	**- —**
320, c.l.....lb.	**.17½-**	**—**
10 dms.....lb.	**.18**	**- —**
1 dm.....lb.	**.18½-**	**—**

Lewisol resin prices are f.o.b. cars, New England states; Middle Atlantic states; Va.; W.Va.; N.C.; Ky.; Ohio; Mich.; Ind.; Ill.; Wis.; St. Paul and Minneapolis, Minn.; St. Louis, Mo. For less than dm. quantities add 5c. per lb. to one-drum prices.

N

Neo-fat drying oil, 3-R, dms., c.l., dms..lb.	.13¾-	—
17, dms., c.l., dlvd.....lb.	.13¾-	—
19, dms., c.l., dlvd.....lb.	**.18**	**- —**
23, dms., c.l., dlvd.....lb.	Nom.	
Neo-fat drying oil, 170, dms., c.l., dlvd..lb.	.16	- —
190, dms., c.l., dlvd.....lb.	**.20**	**- —**
290, dms., c.l., dlvd.....lb.	.22	- —

Neo-fat prices are ¼c. per lb. higher in Texas, ¾c. higher on Pacific Coast.

Nevillac, pale, hard, dms., works, lb.	**.19**	**- —**
hard, 85-90° C, dms., works..lb.	.17	- —
soft, 65-75° C, dms., works..lb.	.17	- —

Nevillas prices on contracts terminating Dec., 1941, are ¼c. per pound lower; Los Angeles and San Francisco ex whse., 3c. per pound extra.

Neville resin, R-1 nevindene, col. ½, dms., works..lb.	**.13¼-**	**—**
R-3, nevindene, col. 1, dms., works..lb.	**.12¼-**	**—**
R-5, nevindene, col. 1½-2, dms., works..lb.	**.11¼-**	**—**
R-6, nevindene, col. 2½-3½, dms., works..lb.	**.10¼-**	**—**
R-7, N.P.S., col. below 3, dms., works..lb.	**.13**	**- —**

Neville resin, R-8, N.P.S., col. below 3, dms., works..lb. .13½- —
R-9, hard, col. ⅛, dms., works..lb. .13 - —
R-10, hard, col. 1, dms., works..lb. .12 - —
R-11, hard, col. 1½-2, dms., works..lb. .11 - —
R-12, hard, col. 2½-3½, dms., works..lb. .10 - —
R-13, medium, col. ⅛, dms., works..lb. .12½- —
R-14, medium, col. 1, dms., works..lb. .11½- —
R-15, medium, col. 1½-2 dms., works..lb. .10½- —
R-16, medium, col. 2½-4, dms., works..lb. .09½- —
R-16A, medium, col. 7-10, dms., works..lb. .08½- —
R-17, medium soft, col. 3½-8, dms., works..lb. .10½- —
R-19, medium soft, col. 3½-8, dms., works..lb. .10½- —
R-21, soft, col. 3½-8, dms., works..lb. .10½- —
R-22, special, soft, col. 3½-8, dms., works..lb. .10½- —
R-27, medium, soft, col. 1, dms., works..lb. .13½- —
R-28, medium soft, col. 1½-2, dms., works..lb. .12½- —
R-29, medium soft, col. 2½-8, dms., works..lb. .10½- —
465, 110-125° C., dms., gross weight, f.o.b. Pittsburgh..lb. .03¾- —

Neville resin prices, except 465 resin, are freight equalized with Phila.; prices on contracts terminating Dec., 1941, are ¼c. per pound lower; Los Angeles and San Francisco ex whse., 3c. per pound extra. Less then full drum shipments are 5c. per pound additional, f.o.b. Neville Island, Pa.

Nevillite, "V," water-white, 100-lb. dms., works..lb. 1.30 - —
No. 4, very light straw, 100-lb. dms., works..lb. .52 - —
No. 128, water-white, 100-lb. dms., works..lb. .60 - —
Nevinol, dms., works.....lb. .13 - —
oil, heavy, rfd., dms., works, lb. .10 - —
Notol, dms., returnable, f.o.b. Pittsburgh..gal. .35 - —
Nuba, 1, 80-95°C., dms., gross weight, works..lb. .0290- —
2, 100-125°C., dms., gross weight, works..lb. .0290- —
3x, 135-150°C., dms., gross weight, works..lb. .04¼- —

Nuba resin prices on contracts terminating December, 1941, are ¼c. per pound lower; Los Angeles and San Francisco ex whse., 3c. per pound extra.

Nuodex drier, cobalt, 6%, 400-lb. pkgs..lb. .31¼- —
11½%, 100-lb. pkgs.....lb. .57 - —
cobalt acetate, 100-lb. pkgs., lb. .83¾- —
iron, 6%, 400-lb. pkgs.....lb. .15¼- —
11%, 100-lb. pkgs.....lb. .26 - —
lead, 24%, 450-lb. pkgs.....lb. .14½- .15½
32%, 450-lb. pkgs.....lb. .18¾- —
34%, 100-lb. pkgs.....lb. .19½- —
40%, 100-lb. pkgs.....lb. .23 - —
lead 30%, cobalt 3%, 150-lb. pkgs..lb. .32 - —
lead 30%, manganese 3%, 150-lb. pkgs..lb. .25 - —
manganese, 6%, 400-lb. pkgs..lb. .16¼- .17¼
10½%, 100-lb. pkgs.....lb. .27¼- —
Zinc, 8%, 400-lb. pkgs.....lb. .16¼- —
10%, 400-lb. pkgs.....lb. .19¾- —
14%, 100-lb. pkgs.....lb. .27 - —
Nuodite, cobalt, 18%, 100-lb. pkgs., lb. .79 - —
lead, 64%, 100-lb. pkgs.....lb. .26 - —
manganese, 24%, 100-lb. pkgs., lb. .33 - —

All prices are f.o.b. customers' plants, East of Denver.

Nypene resin, dms., works....lb. .30 - —

P

Paradene, No. 1, 75-90° C., dms., gross wt., works..lb. .05 - —
2, 100-124° C., dms., gross wt., works..lb. .05 - —
3, 125-140° C., dms., gross wt., works..lb. .05½- —

Paradene prices on contract, terminating Dec., 1941, are ¼c. lower; prices are freight equalized with Philadelphia, Pa.

Paradura resin, grade AV, c.l., dlvd..lb. .28 - —
10 pkgs. or more, dlvd.....lb. .29 - —
9 pkgs. or less, dlvd.....lb. .30 - —
C, c.l., dlvd.....lb. .33 - —
10 pkgs. or more, dlvd.....lb. .34 - —
9 pkgs. or less, dlvd.....lb. .35 - —
10-P, c.l., dlvd.....lb. .35 - —
10 pkgs. or more, dlvd.....lb. .36 - —
9 pkgs. or less, dlvd.....lb. .37 - —
46, c.l., dlvd.....lb. .22½- —
10 pkgs. or more, dlvd.....lb. .23 - —
9 pkgs. or less, dlvd.....lb. .23½- —
273, c.l., dlvd.....lb. .23 - —
10 pkgs. or more, dlvd.....lb. .24 - —
9 pkgs. or less, dlvd.....lb. .25 - —
367, c.l., dlvd.....lb. .35 - —
10 pkgs. or more, dlvd.....lb. .36 - —
9 pkgs. or less, dlvd.....lb. .37 - —
540, c.l., dlvd.....lb. .35 - —
10 pkgs. or more, dlvd.....lb. .36 - —
9 pkgs. or less, dlvd.....lb. .37 - —
Paranol resin, extra hard, No. 1, c.l., dlvd..lb. .15 - —
10 pkgs. or more, dlvd.....lb. .15½- —
9 pkgs. or less, dlvd.....lb. .16 - —
Extra hard, No. 3, c.l., dlvd.lb. .14 - —
10 pkgs. or more, dlvd.....lb. .14½- —
9 pkgs. or less, dlvd.....lb. .15 - —
Hard, No. 1, c.l., dlvd.....lb. .13½- —
10 pkgs. or more, dlvd.....lb. .14 - —
9 pkgs. or less, dlvd.....lb. .14½- —
Hard, No. 3, c.l., dlvd.....lb. .12½- —
10 pkgs. or more, dlvd.....lb. .13 - —
9 pkgs. or less, dlvd.....lb. .13½- —
25, c.l., dlvd.....lb. .12½- —
10 pkgs. or more, dlvd.....lb. .13 - —
9 pkgs. or less, dlvd.....lb. .13½- —
25, light, c.l., dlvd.....lb. .13 - —
10 pkgs. or more, dlvd.....lb. .13½- —
9 pkgs. or less, dlvd.....lb. .14 - —
54-E, c.l., dlvd.....lb. .16½- —
10 pkgs. or more, dlvd.....lb. .17 - —
9 pkgs. or less, dlvd.....lb. .17½- —
100, c.l., dlvd.....lb. .17 - —
10 pkgs. or more, dlvd.....lb. .17½- —
9 pkgs. or less, dlvd.....lb. .18 - —
105-B, c.l., dlvd.....lb. .13 - —
10 pkgs. or more, dlvd.....lb. .13½- —
9 pkgs. or less, dlvd.....lb. .14 - —
200, c.l., dlvd.....lb. .17½- —
10 pkgs., dlvd.....lb. .18 - —
9 pkgs., dlvd.....lb. .18½- —
500, hard, c.l., dlvd.....lb. .14½- —
10 pkgs. or more, dlvd.....lb. .15 - —
9 pkgs. or less, dlvd.....lb. .15½- —
500, extra hard, c.l., dlvd....lb. .17 - —
10 pkgs. or more, dlvd.....lb. .17½- —
9 pkgs. or less, dlvd.....lb. .18 - —

Neville Resin—Vanadiset

Paranol, 800, extra light, c.l., dlvd..lb. .15 - —
10 pkgs. or more, dlvd.....lb. .15½- —
9 pkgs. or less, dlvd.....lb. .16 - —
800, dark, c.l., dlvd.....lb. .14 - —
10 pkgs. or more, dlvd.....lb. .14½- —
9 pkgs. or less, dlvd.....lb. .15 - —
850, c.l., dlvd.....lb. .15 - —
10 pkgs. or more, dlvd.....lb. .15½- —
9 pkgs. or less, dlvd.....lb. .16 - —
1600, c.l., dlvd.....lb. .14½- —
10 pkgs. or more, dlvd.....lb. .15 - —
9 pkgs. or less, dlvd.....lb. .15½- —
1700, c.l., dlvd.....lb. .16 - —
10 pkgs. or more, dlvd.....lb. .16½- —
9 pkgs. or less, dlvd.....lb. .17 - —
1750, c.l., dlvd.....lb. .15 - —
10 pkgs. or more, dlvd.....lb. .15½- —
9 pkgs. or less, dlvd.....lb. .16 - —
1855, c.l., dlvd.....lb. .13 - —
10 pkgs. or more, dlvd.....lb. .13½- —
9 pkgs. or less, dlvd.....lb. .14 - —
3046-C, c.l., dlvd.....lb. .22½- —
10 pkgs. or more, dlvd.....lb. .23 - —
9 pkgs. or less, dlvd.....lb. .23½- —
3101, c.l., dlvd.....lb. .15¾- —
10 pkgs. or more, dlvd.....lb. .16¼- —
9 pkgs. or less, dlvd.....lb. .16¾- —
3645, c.l., dlvd.....lb. .15 - —
10 pkgs. or more, dlvd.....lb. .15½- —
9 pkgs. or less, dlvd.....lb. .16 - —
Pentalyn, dms., c.l., f.o.b. cars, destination, Zone 1..lb. .12 - —
l.c.l., 10 dms., same basis...lb. .12½- —
single dms., same basis..lb. .13 - —
smaller lots, f.o.b. Hercules, Del..lb. .18 - —
Pentalyn G, dms., c.l., f.o.b. cars, destination, Zone 1..lb. .13½- —
l.c.l., 10 dms., same basis, lb. .14 - —
single dms., same basis..lb. .14½- —
smaller lots, f.o.b. Hercules, Del..lb. .19½- —
Phenester, color 3½-5, dms., works, lb. .17 - —
P.H.O., dms., works.....lb. .24 - —
Pliolite, powder, ton lots, works, lb. .66 - —
smaller lots, works.....lb. .69 - .74
Pliolite resin, clear, ton lots, works..lb. .75 - —
smaller lots, works.....lb. .79 - .84
No. 20, ton lots, works.....lb. .75 - —
smaller lots works.....lb. .79 - .84
No. 40, ton lots, work.....lb. .75 - —
smaller lots, works.....lb. .79 - .84

R

Resinous oil, No. XI, dms., works, lb. .03 - —

S

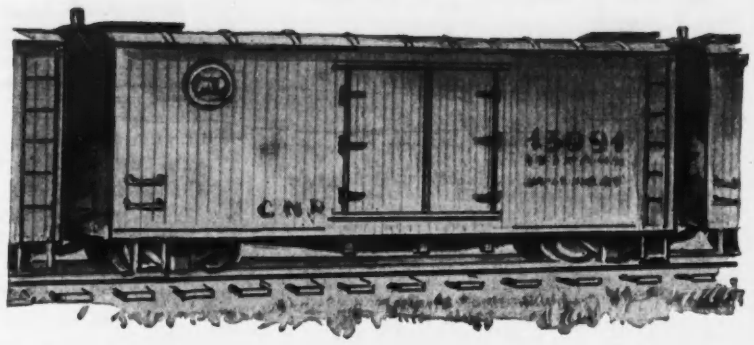
Staybelite resin, c.l. (36,000 lbs.), f.o.b. cars East of and including N. D., S. D., Neb., Kan., Okla. and Tex..lb. .06 - —
l.c.l., dms. (500 lbs.), same basis..lb. .06½- —
smaller lots, f.o.b. Hattiesburg, Miss., or Hercules, Del..lb. .20 - —
Surfex, bgs., c.l., f.o.b. Painesville, Ohio..ton.27.50 - —
BB, bgs., c.l., same basis..ton.32.00 - —
MM, bgs., c.l., same basis..ton.30.00 - —
Syntex, standard alkyd resins, No. 9, 10 dms..100 lbs.18.25 - —
1-9 dms.....100 lbs.18.50 - —
17, 10 dms.....100 lbs.15.00 - —
1-9 dms.....100 lbs.15.25 - —
18, 10 dms.....100 lbs.17.50 - —
1-9 dms.....100 lbs.17.75 - —
19-A, 10 dms.....100 lbs.16.75 - —
1-9 dms.....100 lbs.17.00 - —
20-A, 10 dms.....100 lbs.18.75 - —
1-9 dms.....100 lbs.19.00 - —
21-B, 10 dms.....100 lbs.15.25 - —
1-9 dms.....100 lbs.15.50 - —
22, 10 dms.....100 lbs.15.75 - —
1-9 dms.....100 lbs.16.00 - —
23, 10 dms.....100 lbs.14.75 - —
1-9 dms.....100 lbs.15.00 - —
28, 10 dms.....100 lbs.19.50 - —
1-9 dms.....100 lbs.19.75 - —
32, 10 dms.....100 lbs.15.25 - —
1-9 dms.....100 lbs.15.50 - —
36, 10 dms.....100 lbs.18.75 - —
1-9 dms.....100 lbs.19.00 - —
40, 10 dms.....100 lbs.19.50 - —
1-9 dms.....100 lbs.19.75 - —
119, 10 dms.....100 lbs.22.50 - —
1-9 dms.....100 lbs.22.75 - —
H-3, 7 dms.....100 lbs.15.50 - —
1-6 dms.....100 lbs.15.75 - —
H-3, pale, 7 dms.....100 lbs.15.50 - —
1-6 dms.....100 lbs.15.75 - —
H-10, 10 dms.....100 lbs.18.50 - —
1-9 dms.....100 lbs.18.75 - —
H-12, 10 dms.....100 lbs.19.00 - —
1-9 dms.....100 lbs.19.25 - —
H-15, 10 dms.....100 lbs.14.50 - —
1-9 dms.....100 lbs.14.75 - —
H-46, 10 dms.....100 lbs.14.50 - —
1-9 dms.....100 lbs.14.75 - —
Tentative alkyd resins, 14, 10 dms..100 lbs.16.50 - —
1-9 dms.....100 lbs.16.75 - —
16, 10 dms.....100 lbs.19.00 - —
1-9 dms.....100 lbs.19.25 - —
23, 10 dms.....100 lbs.21.50 - —
1-9 dms.....100 lbs.21.75 - —
32-A, 10 dms.....100 lbs.15.75 - —
1-9 dms.....100 lbs.16.00 - —
42, 10 dms.....100 lbs.17.75 - —
1-9 dms.....100 lbs.18.00 - —
121, 10 dms.....100 lbs.17.50 - —
1-9 dms.....100 lbs.17.75 - —
217, 10 dms.....100 lbs.15.00 - —
1-9 dms.....100 lbs.15.25 - —
H-5, 10 dms.....100 lbs.16.50 - —
1-9 dms.....100 lbs.16.75 - —
H-46, 10 dms.....100 lbs.14.50 - —
1-9 dms.....100 lbs.14.75 - —

Syntex prices are f.o.b. Louisville, Ky., freight prepaid and allowed to destination in New England, the Middle Atlantic States, Va., N. C., S. C., W. Va., Ohio, Ky., Tenn., Ind., Ill., Mich., Wis., Iowa and Mo. and the cities of Minneapolis and St. Paul, Minn.; Atlanta, Ga., Omaha and Lincoln, Neb., and Montreal and Toronto, Canada. For shipment to other points East of the Rockies and not listed above, add 1c. per pound. For shipment in 5-gal. pails add 3c. per lb. for solid resins and 2c. per lb. solutions.

V

Vanadiset resin, dlvd. Balto.-Washington area, contract, 26-1000 tons per month..ton.29.00 -35.40
spot, 1-25 tons, per shpt..ton.41.40 -63.00
under 1 ton, per shpt.....ton.63.00 - —
Camden, Phila., East Pa., Del., contract, 26-1000 tons per month..ton.28.60 -34.00
spot, 1-25 tons per shpt..ton.41.00 -62.00
under 1 ton, per shpt...ton.82.00 - —
Canada (Windsor to Montreal), contract, 26-1000 tons per month..ton.33.20 -38.60
spot, 1-25 tons per shpt..ton.44.60 -66.00
under 1 ton, per shpt....ton.86.00 - —

—Continued on page 79



So Your Resins Hopped The Freight!

SURE! Defense demands on transportation are at their peak—a new freight car . . . or a freshly painted one . . . is a priceless asset these days.

But where—and how—will *you* get resins to meet your civilian needs?

Months ago Durez foresaw this new emergency. Back then, Durez research acted "Johnny on the spot" to cover *your* present needs!

TODAY, Durez has ready a brand-new series of resins to meet the most exacting requirements in your formulations. Call these new Durez resins "replacements" if you will . . . but point for point, they are the equal of any of those previous resins that have made Durez famous!

It is with satisfaction that we make this statement though we regret that production facilities will limit our ability to meet the full demand anticipated for these materials.

DUREZ PLASTICS & CHEMICALS, INC.
311 Walck Road, N. Tonawanda, N.Y.

DUREZ PLASTICS & CHEMICALS, INC.
RESINS THAT FIT THE JOB

GLYPTAL

Appliance and Merchandise Department, Bridgeport, Conn.

GENERAL ELECTRIC

Oil, Paint and Drug Reporter

Founded October 18, 1871, by William O. Allison.

Published every Monday by Schnell Publishing Company, Inc.:—Harry T. Schnell, President and Treasurer; Wm. Stuart Auchincloss, Vice-President and Secretary; Hugh Craig, Vice-President; Burr Price, Vice-President; A. L. Koch, Assistant Secretary. Address 59 John Street, New York, N. Y., U. S. A. Telephone REctor 2-9830. Cable Address Reporter New York.

Incorporating the Drug, Paint and Oil Trade, The New York Drug Bulletin, The Weekly Drug News, the New York Druggists' Price Current, The Soap Makers Journal, the Oil and Paint Review, and International Petroleum Reporter.

Annual subscription rates including postage in the United States and possessions, Cuba, Mexico, Central America, and South America, $5.00; Canada and Newfoundland, $7.00; other countries, $10.00.

Member of Audit Bureau of Circulations.

Entered at the Post Office at New York as second-class matter January 15, 1884, under the act of March 3, 1879.

Copyright, 1941, by Schnell Publishing Company, Inc.

Vol. 140 November 3, 1941 Number 18

Industry's Vital Problem

Many materials are being moved from their customary industrial positions to new jobs under the program of national defense. In largest part, these materials are essential in important industrial operations contributing necessarily to the needs of the public. Their diversion to other uses faces industry, as a normal and most essential part of the general economy, with a vital problem, which must be solved if men are adequately to be employed and industry itself is not in substantial measure to die of inanition.

This vital problem admits of two alternate or complementary solutions. Materials having been moved to other jobs, either new materials must be brought to their former jobs or the men whom those jobs supported must be placed in others.

Certain published data indicate that 700,000 persons lost employment between August and September. But, these figures are provided by those interested in the maintenance and expansion of WPA activities. Conditions are so serious, however, that for its own maintenance and preservation business as a whole must compile complete and accurate statistical data—and then go to work to remedy the ills which those data disclose. Something obviously is wrong with figures which show millions more unemployed now than were reported a year ago—quite a few men have meanwhile been diverted to military training.

It is true that men are being laid off in industries which are losing essential materials to defense production. It is also true that men are being taken on to produce articles for defense. It should be determined whether and why far less men should be required to convert a given aggregate of various materials into articles of defense than were employed in the utilization of the same materials, often in lesser quantities, in the production of the customary articles of commerce. Can it be that the highly efficient machanization of normal industry is far exceeded in the operations of defense production?

Factual data are needed—but they will provide only a starting point in solving industry's vital problem.

The Job Is for Business

Adaptability is man's most useful characteristic under exigencies. It is a characteristic which has been atrophied much since the generations of the compulsorily self-reliant pioneers. There could be no more convincing testimony of this than the extensive demand for governmental aid, even in the contemplated resettlement in new lands of the irksomely crowded peoples of those which have grown crabbedly old.

The characteristic of adaptability has not wholly been lost. The "Do what we can with what we have" of the York plan is evidence to the contrary. The conversion of all sorts of manufacturing plants, large and small, to all other sorts of tasks tells the same story. But, not all who try adaptations are adaptable. The obvious inexperience of some reporting ventures is certain to bring no good to their defense undertakings and may work national harm.

So, there is a foundation on which business as a whole may rebuild the industrial structure damaged by the demands of defense. There is also, in the ill-advised individual efforts to get into defense work, a reason why business as a whole should take charge of the compulsory readjustments. The problem is a national one. It must be handled with a national purpose, and its solution must be approached by way of national planning.

And this is one job in which governmental aid should not be sought or accepted except as a last resort. "National" does not mean "political"; national planning is not a politicians' job. But, it is a job which must be done now, and business should know that it must not, even by delay, give politicians an excuse for taking over jobs which they cannot do.

—O-P-D—

Substitutes for Tung Oil

Much interest was manifested by paint technicians in convention last week when the statement was made that stillingia oil was a promising substitute for tung oil both in physical properties and in possibilities of cultivation in this country. Anything which promises relief from the now stringent and always uncertain supply of tung oil appeals to the paint and varnish maker. Most substitutes, even agricultural projects of bringing the oil to a domestic status, disappoint.

There are various reasons for this; just as there were various reasons why tung oil long ran a poor second to linseed oil in the paint and varnish industry. The reasons are not all the same, but they have more than a little in common. The chief reason for the narrowness of the group of accepted drying oils is, as it was in the slow acceptance of tung oil, lack of knowledge of how to handle other oils. If, as, and when the studies of oil bodying and oil-resin reactions provide knowledge of the phenomena involved, it may become practicable to use almost any oil of high iodine value in full place of any customary drying oil.

Drying properties of oils are attributed to various characteristics: the iodine value alone is but an indication of possibilities. Some lay stress on the bromide test, but tung oil rates relatively very low in that respect in comparison with linseed oil. But, tung oil has individual properties which give it a preferential economic standing.

Stillingia oil was said at the paint technicians' convention to have an iodine number above 165—tung oil averages on published records about 162; linseed oil, 187; chia oil, 193; perilla oil, 196; these averages being above the commercial rating in some cases. Recorded data for stillingia oil give it a range of iodine value from 146 to 161. These data do not rule out a higher value, because all drying oils from selected seeds show higher than ordinary iodine values. In iodine value, stillingia oil ranks with gynocardia oil and hempseed oil, both of which are good drying oils in applications more or less limited by reason of inadequate experimentation.

From a basic economic standpoint it would seem that the best place to direct studies for the development of a substitute for drying oils is the field of annual or, at most, biennial plants. Trees which require four or more years to reach bearing age tie up money, and when they are frostbitten or otherwise put out of production for a season or two, there is a real loss.

There is more than one reason to believe that many oils of iodine values which place them in the category of drying oils require selective technics for their best utilization. It is not beyond probability that with such technic more than one of the many such oils would produce results equal to those for which tung oil is valued. Along such lines of development, research may be expected to pay well. Perhaps further scientific knowledge of the processes of drying, polymerization, oil-resin reactions, and other phenomena is prerequisite. But, the possibilities of empiric experimentation have not been exhausted.

—O-P-D—

Profitable Altruism

There must be more than a trace of altruism in the makeup of those who support and further the education of young persons in their chosen field of endeavor. Selfishness dictates the exclusion of others, particularly of those who may be considered to know more and, therefore, expected to go farther and faster. It may be that this sort of altruism is tinctured with what the hard-headed industrialist and many professional men call enlightened selfishness in an excusing of their apparent softness.

Whatever its motive, the practice crops up in all sorts of industrial corners. It is markedly characteristic of the technical men of the paint, varnish, and lacquer industry—and these men find reason for particular gratification in the fact that the youngsters helped by their scholarships bring the talents thus acquired into their industry. Some explanation of this may be inferred from the extent to which these industrial technicians interchange information out of their individual experiences and also join in cooperative studies with commercial competitors.

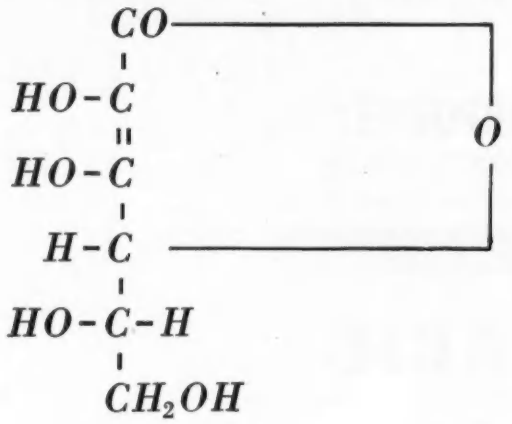
The paint technicians' altruistic and long-sighted supporting of educational equipping of collaborators, competitors, or successors may stem somewhat from the fact that there are no strictly paint schools. In the drug industry, for example, which has its teaching institutions in plenty, the technicians are not especially education-minded. There may be a reason for this in the fact that they are much more loosely organized than are their paint compeers.

The idea deserves study and emulation in more than one field. It really pays in the paint industry.

DEPENDABLE!

The manufacture of Pfizer Ascorbic Acid results from independent research, combined with engineering skill and operating efficiency. Our proven process and ample supply of raw materials insure uninterrupted production . . .

ASCORBIC ACID



Molecular **Weight**—176.06

Ascorbic Acid (l-Ascorbic Acid) is recognized as being Vitamin C. The U.S.P. and International Units of Vitamin C are defined as 0.05 mg. of ascorbic acid; 1 gram of ascorbic acid is therefore equal to 20,000 U.S.P. or International Units.

Manufacturing Chemists

PFIZER QUALITY

Est. 1849

CHAS. PFIZER & CO., INC.

81 Maiden Lane, New York, New York 444 West Grand Ave., Chicago, Illinois

INDUSTRIAL CHEMICALS

AMERICAN-BRITISH CHEMICAL SUPPLIES, Inc.
180 MADISON AVE. Telephones: AShland 4-2265 and 4-2266 NEW YORK

PM Since 1905

PHOSPHORUS (Yellow) Produced in our own electric furnace using phosphate rock from our own mines.

PHOSPHORIC ACID 75% Pure Food Grade. Made from high quality elemental phosphorus.

"ELECTROPHOS". A superior quality of triple superphosphate of approximately 48% available P_2O_5. Almost white in appearance.

FLORIDA PEBBLE PHOSPHATE ROCK. Grades 77% B.P.L. and all standards to 68%. Also of special specifications—quality—calcining—grinding.

THE PHOSPHATE MINING COMPANY
110 William Street, New York Nichols, Florida

SODIUM SULPHIDE

BARIUM CARBONATE
BLANC FIXE
BARIUM OXIDE
BARIUM CHLORIDE
BARIUM PEROXIDE
BARIUM HYDRATE

Manufactured by

BARIUM REDUCTION CORPORATION
OFFICE AND WORKS: SOUTH CHARLESTON, W.VA.

CHEMICALS Philipp Bros. METALS · ORES

TARTARIC ACID
(GUARANTEED U. S. P.)

ZINC OXIDE, French Process

ZINC SULPHATE - COPPER CARBONATE

Philipp Brothers, Inc.
Boston 70 Pine Street, New York Providence

Turner CHEMICALS

ZINC STEARATE
U. S. P.

C. P. SALT

JOSEPH TURNER & COMPANY
RIDGEFIELD N. J.

Heavy Chemicals

Ammonia Bicarbonate and Carbonate Contract Prices Extended —Priority Compliance and Inventory Control Order Awaited —Soda Bicarbonate, Monohydrated and Sal Soda Remain Firm

A few more announcements concerning next year's contract schedules made their appearance last week. One producer was writing contracts for ammonia carbonate and bicarbonate at existing levels to December 31, 1942. In view of the prevailing conditions, however, all orders are subject to acceptance as to quantities and dates of delivery. Contracts covering next year's deliveries of soda bicarbonate, monohydrate and sal soda were also taken at unchanged levels.

Broad defense and civilian buying characterized the business in the market for heavy chemicals. Movement of raw materials for defense under priority control continued to expand. The OPM was expected to issue stricter compliance control measures to prevent use of materials obtained under priorities for other than defense purposes. Inventories also will be regulated to keep stocks at a minimum working level. The recent strikes and threatened strikes in key defense industries brought about congressional consideration of legislation to cope with the situation.

Paper production, as a percentage of a six-day capacity, was 107.5 in week ended October 25, according to the American Paper and Pulp Association. This compares with 104.9 percent in the previous week and 85.9 percent a year ago. Because of the acute shortage of paper, the Economic Defense Board issued export control schedule No. 23, placing under control a long list of forms, conversions and derivatives of paper.

Alums.—Buying steady. Market position strong. Prices rule unchanged.

Alumina Hydrate.—Firm price tone prevails. Good inquiry.

Alumina Sulphate.—Demand heavy. Quotations held firm.

Ammonia, Anhydrous. — Defense needs broadening, business allocated. Prices were firm.

Ammonia, Aqua.—Situation continued tight. No change disclosed in the prices.

Ammonia Bicarbonate. — Current contract prices extended into 1942. Steady interest.

Ammonia Carbonate.—One factor announces contracts offered for next year at same levels. Buying routine.

Ammonia Nitrate.—Defense buying remained heavy. Quotations unchanged.

Ammonia Persulphate.—Market position firm, and transactions steady.

Ammonia Silicofluoride.—Spot offerings light. Prices nominal.

Ammoniac, Sal.—Shipments moved at a good pace to keep market in strong position.

Antimony Oxide.—Supplies tight, offerings restricted to regular channels. Prices remain the same.

Arsenic.—White materials moved in steady volume to regular trade. Prices firm.

Price Changes

Advanced
None

Reduced
None

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
168.3	168.3	168.3	155.9

Index numbers compiled from twenty typical acids on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
109.0	109.0	109.0	101.6

Market news that may have developed after this report was sent to press will be found on page 4.

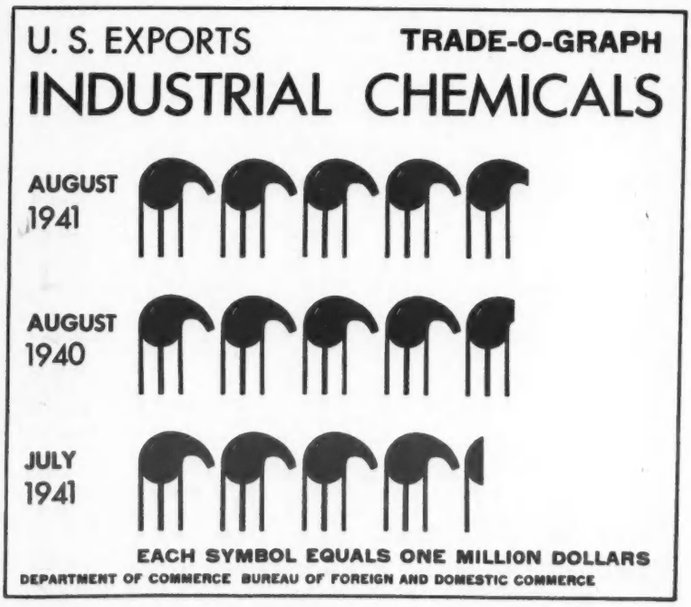
Barium Carbonate.—Defense and civilian buying absorbs available offerings. Prices unchanged.

Barium Chloride.—Shipments steady against contracts. Prices rule unchanged.

Barium Dioxide.—Supplies scarce as defense needs broaden. Prices firm.

Bleaching Powder.—Demand active, sellers unable to take all inquiries. Prices very firm.

Calcium Acetate.—Available sup-



Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 7

Association meetings:—
Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

plies moving direct to consuming channels. Price tone firm.

Calcium Carbide.—Demand brisk. Pricewise a firm tone predominated.

Calcium Chloride.—Shipments held at good levels to keep market in favorable position.

Carbon Bisulphide.—Active interest. Prices display firmness.

Carbon Tetrachloride. — Business governed by rigid priorities. Prices underwent no change.

Chlorine.—Defense needs continued to broaden, and civilian use strictly allocated. Prices were the same.

Cobalt Oxide. — Usual consumers supplied with normal needs. Prices lacked change.

Copper Salts.—Limitations placed on basic metal reflect in supplies of various derivatives. Prices remain firm.

Copper Sulphate.—Most sellers well booked ahead. Prices unchanged and firm.

Fluorspar.—Situation tight. Prices remain the same, with tone firm.

Glauber's Salt.—Business confined to regular contract consumers. Prices held firm.

Magnesia Silicofluoride. — Limited supplies. Prices range from 22c. to 25c. per pound.

Manganese Dioxide.—Steady movement continued against contracts. Prices were firm.

Nickel Salts.—Business on prorated basis. Quotations nominal.

Phosphorus.—Defense requirements limit supplies. Prices without change.

Potash Carbonate.—Sellers pressed to take care of all demands. Prices rule firm.

Potash, Caustic.—Shipments active and market in strong position.

Potash Chlorate.—Available supplies well taken. Prices firm.

Potash Permanganate.—Bulk of material taken directly or indirectly for defense. Prices were the same.

Salt.—A firm tone continued in evidence, while shipments were fairly steady.

Saltcake.—Domestic offerings moved directly to consuming channels. Prices unaltered.

Soda Acetate.—Supplies short and business usually allocated. Prices firm.

Soda Bicarbonate.—Contracts covering 1942 deliveries being written at unchanged levels. Demand steady.

Soda Bifluoride.—Inquiries heavy, with offerings limited. Prices remain firm.

Soda Bisulphite.—Situation continued tight. Prices rule firm.

Soda Caustic.—Demand heavy and market position continued to tighten. Prices firm.

Soda Bisulphite.—Spot offerings limited. Prices failed to change.

Soda Chlorate.—Sellers continued to refuse new business. Quotations without change.

Soda Cyanide.—Prices were firm and unchanged. Buying active.

Soda Fluoride.—Market in short supply. No change disclosed in the prices.

Soda Hydrosulphite.—Selling limited to regular channels, market in short supply. Prices without change.

Soda Monohydrated.—One factor extending contracts into next year at same levels. Business routine.

Soda Nitrite.—Good interest. Prices held at same levels with tone firm.

Soda Phosphate.—Various grades in tight supply. Pricewise a firm tone prevailed.

Soda Sal.—Contracts being written for next year at unchanged levels. Shipments steady.

Soda Silicate.—Buying broad. A firm tone characterized the market.

Soda Silicofluoride.—Supplies short, spot offerings very small. Prices nominal.

Soda Sulphide.—Defense and civilian needs keep market in sold up position. Prices display firmness.

Sulphur, Refined.—Active demand from commercial consumers. Prices held firm.

Tetrachlorethylene. — Material subject to rigid priority control. Prices firm.

Zinc Sulphate.—Consumers made steady replacements against contracts. Price tone firm.

Acids

An active demand prevailed in the market for mineral acids last week. Priorities governing defense business, and heavier civilian requirements placed sellers under pressure to meet all needs promptly. Demand was heavy for acetic and acetic anhydride and supplies were short. Chromic and formic remain in a tight position. Buying was broad for muriatic and nitric. Oxalic and phosphoric remained scarce. Sellers limited business in sulphuric to regular contract consumers. Prices failed to change, but the tone held firm.

Acetic.—Active demand, market position tight, and prices at ceiling levels.

Acetic Anhydride. Material scarce. Prices unchanged and firm.

Battery.—Movement steady. Prices underwent no change.

Chromic. — Business usually allocated among regular consumers. Prices firm.

Formic.—Inquiries brisk, and market position firm.

Gallic.—Withdrawals moderate. No new price developments.

Hydrofluoric. — Demand active. Prices remain firm.

Lactic.—All grades moved in good volume. Quotations were firm.

Mixed.—Shipments moved against contracts at good pace. Prices firm.

Muriatic. — Buying broad. Prices held at firm levels.

Naphthenic.—Output moving direct to consuming channels. Prices unaltered.

Nitric.—Defense and civilian requirements large. Prices rule firm.

Oxalic.—Material scarce. Prices underwent no revision.

Phosphoric.—Supplies remain tight. Prices unchanged and firm.

Sulphuric. — Business confined to regular contract consumers for normal requirements. Prices failed to change and tone was firm.

Baltimore, Oct. 29.—Reports about the sulphuric acid market are that the situation has not undergone any change

Soda Ash

Heavy defense, civilian and export demand tightened the market for soda ash. Most producers were experiencing difficulty taking care of all inquiries, and restricted civilian demands to regular contract allotments. Practically all major consuming lines required more soda ash to cope with higher operating schedules. The new munition plants and broader requirements for making aluminum from lower grade ores were direct factors and producers anticipated even greater defense needs over the next year.

Production was expanded somewhat by the erection of new plants and the extensions made to existing production facilities. No exact estimates are available for this year's output, however, figures will be substantially above the 2,961,632 pounds recorded in 1939, according to the latest Census Bureau figures.

A sharp rise occurred in exports so far this year. Most of the inquiries emanate from South America where Great Britain is no longer a major factor. Shipments of soda ash during the first six months of this year amounted to 92,778,082 pounds, compared with 66,452,589 pounds in the like period a year ago. Exports in the 1940 year totaled 116,966,998 pounds, against 160,113,479 pounds in the 1939 period.

A slight revision was made in contract prices for 1942 covering the cost of burlap packings for the only change in the quotations since the war started. The light and extra light in car lots, bags, range from $1.05 to $1.13 per 100 pounds and the dense, bags, $1.15 per 100 pounds.

DIAMOND ALKALIES . . .

DEPENDABLE ASSETS in your plant the year 'round

ALKALI

√ Diamond GUARANTEED PURITY assures you of alkalies always of the highest commercial quality.

√ Diamond CONTROLLED MANUFACTURE means strict adherence to your specifications and exact duplication on all future orders.

√ Diamond DEPENDABLE UNIFORMITY means that, on a given specification, every shipment is absolutely identical.

√ Diamond PROGRESSIVE RESEARCH continuously improves Diamond Products,—makes them more perfectly fit Industry's requirements.

DIAMOND ALKALI COMPANY
PITTSBURGH, PA., *and Everywhere*

FORMIC ACID

85% AND 90% STRENGTHS

Noted for its purity, uniformity, and stability. Will not darken when exposed to light. Will not cloud up when diluted. Free from sulphuric acid, sulphur-bearing compounds, and chlorides.

VICTOR CHEMICAL WORKS
141 WEST JACKSON BOULEVARD CHICAGO, ILLINOIS

METOL
Sole Licensee Registered Trade Mark

TANNIC ACID, U.S.P. and Technical

GALLIC ACID, U.S.P. and Technical

ZINSSER & CO., Inc., HASTINGS-ON-HUDSON NEW YORK

SULPHUR

BORIC ACID : CARBON TETRACHLORIDE : BORAX : TITANIUM TETRACHLORIDE : SULPHUR CHLORIDE : SILICON TETRACHLORIDE CREAM OF TARTAR : SULPHURIC ACID : CAUSTIC SODA WHITING : TARTARIC ACID : LIQUID CHLORINE : SULPHUR TEXTILE STRIPPER : CARBON BISULPHIDE

Stauffer CHEMICALS SINCE 1885

STAUFFER CHEMICAL COMPANY
SAN FRANCISCO, CAL. 420 LEXINGTON AVE., NEW YORK CHICAGO, ILL.

COPPERAS

FERROUS SULPHATE TECHNICAL

PRODUCED AND SOLD BY

NATIONAL LEAD COMPANY
TITANIUM DIVISION
111 Broadway, New York, N. Y.

For Plating, Textile, Chemical, Fungicidal Uses

TC TENNESSEE CORPORATION

Copper Carbonate

(OVER 55% COPPER)

For platers (note higher copper content in this material). Easy to use. More economical. Two types available: dense, heavy grade; light fluffy grade.

Tennessee Corporation ATLANTA, GEORGIA LOCKLAND, OHIO

and that producers continue to fill contracts in force at the figures named in these agreements, but that acid for any other purpose is almost impossible to obtain. The nominal figures stand at $14 per ton for 60-degree and $16 per ton for 66-degree acid. Oleum is firm at $19 per ton nominally for 20 percent supplies.

Insecticides

Transactions in the market for agricultural insecticides and fungicides continued to be restricted by seasonal conditions. While the outlook remained favorable for next season, no worthwhile movement has taken place as yet, except the fact that inquiries reached the market sooner than usual. Prices underwent no changes, and the tone held firm.

Calcium Arsenate.—Seasonal conditions limit transactions. Prices rule firm.

Lead Arsenate.—New business light, some inquiries for next year. Prices without change.

Paradichlorobenzene.—Selling limited, as supplies tighten. Prices firm.

Resale Market

Conditions surrounding business in the resale market underwent little change. Inquiries were active, but supplies available remain limited. Barium chloride ranged from 9½c. to 12c. per pound; bleaching powder, 9½c. per pound; carbon tetrachloride 18c. to 22c. per pound; tetrachlorethylene, 31c. to 35c. per pound; copper sulphate, 6c. to 7c. per pound; cobalt oxide, $2.30 to $2.80 per pound, and magnesia silicofluoride 22c. to 25c. per pound.

Potash salts remain in light supply. Potash carbonate sold from 9¼c. to 13c. per pound; potash caustic, 9c. to 10c. per pound; potash chlorate, 45c. to 47c. per pound; potash metabisulphite, 45c. to 50c. per pound.

Soda ash light was from $2.30 to $2.75 per 100 pounds; soda bisulphite, 10c. to 13c. per pound; caustic soda, $4.25 to $5 per 100 pounds; soda fluoride, 27c. to 30c. per pound, soda hydrosulphite, 33c. to 38c. per pound; soda phosphate, tribasic, $4.45 to $5 per 100 pounds; soda silicofluoride, 22c. to 24c. per pound, and soda sulphide, 9½c. to 11c. per pound.

Acetic acid, 80 percent, offered at 18c. per pound; glacial acetic, 24c. to 25c. per pound; chromic, 23c. to 24c. per pound and oxalic, 36c. to 44c. per pound.

Chemical Salesmen to Hold Christmas Party December 18

The annual Christmas party of the Salesmen's Association of the American Chemical Industry will be held at the Starlight Roof of the Waldorf-Astoria December 18. Reservations have already been received from leaders in the chemical industry from all parts of the country, as well as from numerous members of the association now in government service. Walter Merrill, of Joseph Turner & Co., Ridgefield, N. J., president of the association, will preside. Reservations are in charge of Phil LoBue, of the Michigan Chemical Company, 15 Exchange Place, Newark, 'phone Bergen 4-1716, who is chairman of the entertainment committee.

Ammonia Carbonate and Bicarbonate Prices Extended

Wilmington, Oct. 29, 1941

The National Ammonia Division of E. I. du Pont de Nemours & Co., Wilmington, is writing its contract customers, offering to extend existing contracts for ammonia carbonate and ammonium bicarbonate, to December 31, 1942. The company is making no change in prices, terms, or conditions except that, in view of the prevailing extraordinary conditions, all orders are subject to du Pont's acceptance as to quantities and dates of delivery.

BARIUM HYDRATE and POROUS BARIUM OXIDE (Monoxide)
BARIUM AND CHEMICALS, Inc., Dept. A, Willoughby, Ohio
Successors to The J. H. R. Products Co. *Send for informative booklet*

Manufacturers of
COPPER OXIDES
ROBERT A. COUPE, 260 Rhode Island Ave., Pawtucket, R.I.
Telephone PErry 3354

ACE BRAND
CHARCOAL HARDWOOD or WILLOW
KILN BURNED FORKED LUMP GRANULAR POWDERED
ALABAMA CHARCOAL COMPANY
Division of THOMPSON HAYWARD CHEMICAL COMPANY
KANSAS CITY, MO.

THE ENEQUIST CHEMICAL CO., INC.
INDUSTRIAL CHEMICALS
DRUGS — OILS — WAXES
Inquiries Solicited
251 Freeman Street Brooklyn, N.Y.
ENEQUIST CHEMICALS QUALITY

Broken Rock
Roll Brimstone
Sublimed Flowers
Rubbermakers
Commercial Flour
Dusting
Wettable

SULPHUR

MANUFACTURED AT HOUSTON, TEXAS, BY
SOUTHERN ACID & SULPHUR CO., INC.
Office Rialto Building St. Louis, Mo.

Tanners Council Studies Prices, Production

—Continued from page 3

found. Then, too, for the control of germ life, saltsoaking is effective and salt is plentiful. Another control is the temperature of the water and its frequency of change.

This then generally covers the situation up to the tan yards of chrome shop.

Let us first consider chrome tanning; there is an impending shortage of chrome ore for use in making chrome liquors. This is due to the excessive use of chromium in defense needs. As yet no limitation has been established; but since it would be a major calamity were this to be done, some preparation should be made. I can well visualize that a combination chrome and iron tannage may become necessary. As to its practical application, I can attest, for I have seen light leathers with just such tannages which compared favorably with some of our present chrome tanned leathers.

The other materials used in chrome tanning are not threatened today. Boric acid and borax are again in full production so no further serious shortage should be met. The shortage of oxalic acid may effect a hardship on some chrome tanners but generally substitutes can be found.

In vegetable tanning the situation to date has not effected any hardships but since about 65 percent of the vegetable tanning materials are imported, and must remain dependent upon shipping facilities, this matter may assume worrysome limits. At this time gambier, sumac, valonia and myrobalans are not obtainable. Fortunately we have reasonable substitutes for all but valonia. This latter material is not too essential and many tanners never use a pound of it.

If for any reason the importation of cutch, mangrove and quebracho should be reduced, then the domestic supply of chestnut, oak and hemlock will fall short of our needs. This past season's yield for oak and hemlock (Eastern) was not good; help was inadequate and the season's peel was below normal. Wisconsin and Michigan hemlock is plentiful, and for those tanners who are in this district, it is merely a matter of finding sufficient leaching facilities.

There has been a general interest in new domestic tannin supplies but to date there has developed no commercial application. Western hemlock should not be overlooked. This is a potential source of supply when other materials are not available.

Next a word about the oils and greases used in leather manufacture. Generally there is no shortage. True, some items such as neatsfoot oil are not available, but the oil supply people have done a splendid job of developing substitutes. The prices have gone up considerably but there are no reported shortages. The delay now encountered in getting some deliveries could be reduced if all tanners would try and preserve the containers and resell them to the oil companies.

Dyestuff Supplies

Dyestuff supplies and finish materials will continue to be a headache. In most instances so far reasonable substitutes have been developed. Much research is in progress to develop better substitutes, and to the dyestuff and finish manufacturers, much credit is due for their cooperation.

The most severe shortages are encountered in the field of aniline dyes. This is because the defense agencies have taken practically the entire supply of aniline oil, phenols, toluol, acetic acid anhydride, phthalic acid anhydride and formaldehyde. These same materials are also used in syntans and disinfectants. Due to the lack of available formaldehyde, it may be necessary to change some of the finishes, and to use drying methods to fix them in place of formaldehyde.

Titanium pigments are short and the production is inadequate to supply the present demand. For those tanners of white leathers this is a serious problem. The new white synthetic tanning materials which were recently developed may be a possible substitute.

Increasing Costs

Harold Connett, chairman of the board, in discussing maximum prices and costs, said:—

The problem of maximum price schedules is complicated by the fact that a very large proportion of raw material is imported, and in some cases the foreign raw stock constitutes our total supply. If it were possible to place some form of effective maximum upon foreign material as well as domestic, a good deal of the incessant pressure upon tanners' costs might be relieved. But until that is the case neither tanners nor their customers can minimize the constant threat of increasing costs as available supply resources in world markets are absorbed by belligerent and non-belligerent nations.

Shoe Output Up

Irving R. Glass, economist for the council, in addressing the meeting on "Consumption and Supply of Hides, Skins and Leathers," said:—

The shoe production for the first nine months was at a rate equal to yearly output of 494 million pairs. Granting that 10 or 12 million pairs of that total would be for the account of the government, there would still be a production of more than 480 million pairs of civilian shoes. Average output for the previous five years was only slightly more than 400 million pairs. This gives a total increase, therefore, in the production of shoes from the previous five-year average of some 80 million pairs.

Price Ceilings

Paul M. O'Leary, executive of the Textiles, Leather and Apparel Section of the Office of Price Administration, discussed the recently amended hides and skins price schedules in detail. Harold R. Florsheim, chief of the shoes and leather section of the Division of Purchase of the Office of Price Administration, talked on "Army Shoe Procurements."

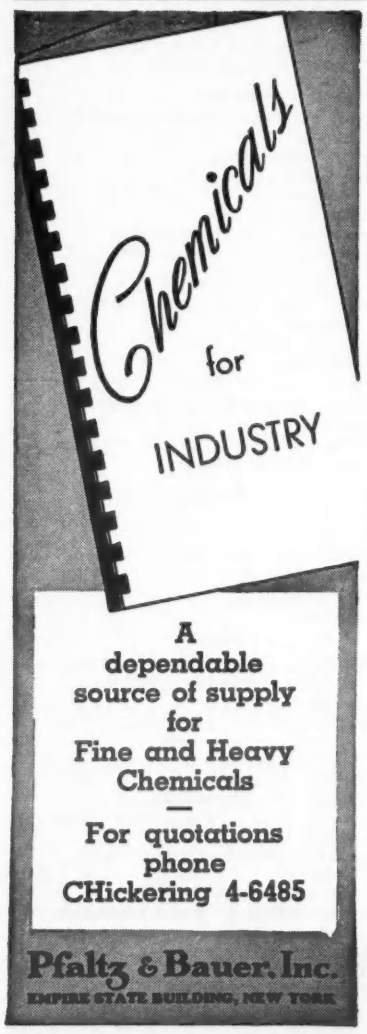
Colonel George S. Brady, material consultant for the Civilian Supply Division of the Office of Price Administration, talked on "Imported Materials for Civilian Supply." Merrill Watson, executive vice-president of the council, told of the various services being rendered members of the council.

Soda Bicarbonate Prices Extended for 1942

The Columbia Chemical Division of the Pittsburgh Plate Glass Company announces that, effective October 27, contracts for 1942 deliveries of bicarbonate of soda are being written. Prices for carload f.o.b. sellers' works are as follows:—

U.S.P. powdered, barrels, $1.85 per 100 lbs.
kegs, $2.10 per 100 lbs.
paper bags, $1.70 per 100 lbs.
U.S.P. granular, barrels, $2.25 per 100 lbs.
Technical powdered, barrels, $1.70 per 100 lbs.
paper bags, $1.55 per 100 lbs.
Flour blend, barrels, $1.90 per 100 lbs.
paper bags, $1.75 per 100 lbs.

Richard S. Shutt, head of the division of chemical research at Battelle Memorial Institute, Columbis, Ohio, is serving as chairman of the Columbus section of the American Chemical Society for the coming year.



BORAX—Plus 99½% Pure
POWDER
FINE GRANULAR

SODIUM SESQUICARBONATE
UNREFINED — For Industry and Mining
PACIFIC CRYSTALS — For Package Trade
LAUNDRY SODA
MILD SODA—For Dairies, Lumber, Tanneries, Textiles

SODA ASH
LIGHT DENSE

PACIFIC BRAND PRODUCTS
PACIFIC ALKALI COMPANY
523 West 6th Street Los Angeles, California

SALT
(SODIUM CHLORIDE)

SALT CAKE
(SODIUM SULPHATE)

Office:
4031 Goodwin Avenue - Los Angeles, Calif.

Industrial Uses of Chemicals and Related Materials

("Where You Can Sell")

Seven-hundred-seventieth Recapitulative Instalment — Fully Protected by Copyright

(Parenthetical figures are the numbers of patents in the United States or other countries, as designated)

Betachlorobutyric Acid

Chemical

New chemical available for experimental use

Cadmium Alginate

(Alginate Cadmique, Alginate de Cadmium, Alginato de Cadmio, Alginato di Cadmio, Alginsaurescadmium, Alginsaureskadmium)

Leather

Coating agent (U.S. 1162926) for—
Leather and leather goods

Miscellaneous

Coating agent (U.S. 1162926) for—
Fabrics

Paper

Coating agent (U.S. 1162926) for—
Cardboard
Paper
Pasteboard

Textile

Coating agent (U.S. 1162926) for—
Fabrics

Cadmium Dithiocarbamate

Rubber

Accelerator (U.S. 1386153) in—
Vulcanization

Cumin Oil

(Aceite Esancial de Comino, Cuminoel, Essence de Cumin, Essence des Graines de Cumin, Essence des Semences de Cumin, Essenza di Cumino, Kreuzkummeloel, Krankummeloel, Mutterkummeloel, Oleum Cumini, Oleum Cymini, Romischer Kummeloel)

(Volatile oil from the fruit of Cuminum cyminum, L.)

Aromatics

Essential oil offering following properties—
Aromatic, disagreeable taste
Colorless to yellow liquid
Contains 30 to 40 percent cuminaldehyde, paracymene, betapinene, dipentene
Heavy, strong, peculiar odor
Insoluble (almost) in water
Optical rotation, +4° to +8° (100-mm. tube at 20°)
Refractive index, 1.4950 to 1.5090
Soluble in dilute alcohol, moreso in strong alcohol, chloroform, ether
Specific gravity, 0.900 to 0.935 (25°/25°)

Beverages

Ingredient of—
Flavoring agents

Chemical

Source of—
Cumic acid (cuminic acid, paraisopropylbenzoic acid)
Cumic alcohol (cuminol, cuminyl alcohol, cuminic alcohol, paraisopropylbenzyl alcohol)
Cuminal (cuminaldehyde, cuminic aldehyde, paraisopropylbenzaldehyde
Hydrocuminic aldehyde

Food

Ingredient of—
Condiments
Flavoring agents

Perfume

Compounding oil for—
Orris, cassia, violet, and hyacinth odors

Ingredient of—
Essences and other perfumery preparations

Pharmaceutical

In compounding and dispensing practice

Suggested for use as—
Anticolic agent
Aromatic
Carminative
Digestive agent
Stimulant

Suggested for use in making—
Liniments
Plasters

Veterinary Medicine

In compounding and dispensing practice

(See also "Pharmaceutical")

Detergent Alkalies

(This survey of uses refers to various mixtures or combinations of products based on soda compounds, such as the bicarbonate, the caustic, and the various carbonates, phosphates, borates, and the like; these are commonly marketed under various trade-names and may—or may not—be described, variously:—For example (1) "an alkaline mixture especially suited for detergent purposes," (2) "bottlers' alkali," (3) "brewers' alkali," (4) "a scientific blend of crystalline soda products," (5) "special duty detergent," (6) "a comparatively mild combination of sodium carbonate and sodium bicarbonate," (7) "tanners alkali," (8) "a blend of basic alkaline materials, finely-divided scouring materials, water softening agents, soap, emulsifiers, and mop or brush lubricating agents"; the uses given below embrace all those for which these "special alkalies" have found markets; however, it must not be supposed that any one mixture is suitable for all purposes; thus, the special titles often indicate the direct field of specialized application, the illustrative examples given above are entirely fictitious and any resemblance to the proprietary titles of actual producers or marketers is entirely coincidental)

Abattoir

Cleasing agent for—
Apparatus and plant equipment
Degreasing agent for—
Apparatus and plant equipment
Stain remover for—
Apparatus and plant equipment

Automotive

Cleansing agent for—
General factory use
Glass
Radiators

Degreasing agent for—
Floors, runways, and the like
Metals

Beverage

Cleansing agent for—
Bottles
Vats
Casks

Softening agent for—
Water

Sterilizing agent for—
Bottles

Brewing

Cleansing agent for—
Bottles
Vats
Casks

Softening agent for—
Water

Sterilizing agent for—
Bottles

Ceramic

Cleansing agent for—
Ware prior to shipment

Deflocculating agent

Stain-removing agent for—
Ware prior to shipment

Chemical

Cleansing agent for—
Plant equipment, floors, walls, utensils

Construction

Remover of—
Oil, grease, stains, and dirt from metal, marble, tile, porcelain, and woodwork in new buildings

Dairy

Cleansing agent for—
Bottles, cans, other containers
Plant equipment, floors, walls, tiles

Reagent for—
Milkstone removal

Stain-removing agent for—
Bottles, cans, other containers
Plant equipment, floors, walls, tiles

Fats and Oils

Cleansing agent for—
Apparatus
Utensils

Food

Cleansing agent for—
Baker's mixers, kneaders, trays, and the like
Canning plant equipment
Food product plant equipment
Hotel equipment
Restaurant equipment

Glass

Cleansing agent for—
Plate glass
Window glass
Tableware

Degreasing agent for—
Plateglass
Window glass
Tableware

Laundering

Builder for—
Soaps (specific alkali agents or compositions or mixtures containing these agents)

Cleansing agent for—
Floors, walls, and the like
Plant machinery, such as washing machines, weighing machines, starch boilers, centrifugal dehydrators, and the like

Detergent for—
Badly soiled fabrics
Colored goods
Cotton fabrics
Rugs and carpets
Speeded-up operations
Woolens

Eliminator of—
Lime soaps (gray curd)

Softening agent for—
Water

Leather

Base material in preparing—
Alkaline bath in bleaching vegetable tanned leather
Neutralizing bath in chrome tanning operations

Cleansing agent for—
Plant and its equipment

Swelling agent in—
Tanning

Mechanical

Base in—
Boiler compounds (this refers to particular alkali ingredients)

Cleansing and degreasing agent for—
Machinery and equipment generally

Metallurgical

Degreasing agent for—
Metals

Miscellaneous

Cleansing, degreasing, and deodorizing agent for—
Bathtubs, basins, and similar fixtures
Bottles, dishes, glassware, cooking utensils, enamelware, furniture, household use, ice boxes, linoleum, machinery, marble counters, marble columns, walls, and slabs
Factories, schools, garages, service stations, boilerrooms, stores, markets, public buildings, and the like
Hotel, hospital, and restaurant table tops, utensils, dishwashers, and other equipment
Metal parts and fixtures, painted surfaces, rubber flooring, shelving, silverware, sinks, stone flooring, soda fountains, tableware, tiling, windows, walls, wooden flooring, workmen's hands

Cleansing, degreasing and deodorizing agent for—
Stained floors, driveways, runways, such as those in factories, garages or other public buildings or plants

Sanitation and Water

Cleansing agent for—
Industrial purposes, having adjunct water-softening properties

Sterilizing agent for—
Various purposes

Soap

Builder for—
Soap

Textile

Cleansing agent
Degreasing agent
Degumming agent
Scouring agent
Washing agent

Wood

Preservative for—
Lumber

Preventive of—
Blue stain (a fungus)

Isobutylene Polymers

(Polybutene Rubber, Synthetic 100, Vistanex)

(Synthetic substitute for rubber available in low, medium, and high molecular weights; the uses given below are composite for all molecuweights)

Adhesives

Improver in—
Adhesive compositions for various purposes

Automotive

Improver in construction material for—
Deicing equipment
Steering wheels
Tank treads
Tire treads
Windlace tubing

Improver of—
Impermeability of inner tubes
Resistance to repeated flexing

Aviation

Improver in construction material for—
Deicing equipment
Inner tubes
Tire treads

Improver of—
Impermeability of inner tubes
Resistance to repeated flexing

Building

Improver in construction material for—
Electrical insulation
Flooring and tiling
Flooring compositions

Improver and modifying agent for—
Asphalt
Asphalt compositions and coatings and impregnations

Bituminous

Improver of—
Low temperature flexibility
Moisture vaporproofness
Sealing strengths

Modifying agent for—
Asphalts

Chemical

Construction lining material claimed to offer following advantages—
Heat resistance
High resistance to adherence of materials to its surface by reason of packing, caking, and the like
Lasting protection of all metal equipment depending on materials it is brought in contact with
Low maintenance cost
Moldability
Protection of materials from—
Discoloration by metal containers and processing equipment
Iron pick-up
Toxic changes
Strength and toughness

(To be continued)

Do Your Own Allocating; Consult:—

Uses and Applications of Chemicals and Related Materials

A cloth-bound book of 665 pages (6 x 9) containing information similar to that above on 5,167 materials

$10; postage paid in U.S.; 39c. postage elsewhere

Dyestuffs, Textile and Leather Chemicals

Egg Albumen Prices Higher—Dark Blood Albumen Advanced —Arrivals From Far East Ease Sago and Tapioca Flour —Prices for Powdered Myrobalan Extract Withdrawn

Price movements were irregular in the market for dyestuffs, textile and leather chemical market last week. Domestic and imported egg albumen was higher on limited offerings, and quotations for dark blood albumen were raised. Recent arrivals from the Far East eased prices for sago and tapioca flour. One seller withdrew prices for powdered myrobalan extract, because of the difficulty in obtaining raw material replacements.

Supplies of most materials continued limited. Direct and indirect defense needs together with heavier civilian requirements kept demand steady. Several of the raw tanning materials continued to be affected by shipping difficulties. Most of the chemicals were tight because of direct defense priorities; however, in many instances suitable substitutes were found.

It is doubtful whether supplies of domestic tanning extracts such as chestnut, oak and hemlock bark extracts would be sufficient to provide all needs if for any reason the importations of cutch, mangrove and quebracho should be reduced. So far supplies of gambier, sumac, valonia and myrobalans have been cut off.

Chemicals

Alumina Acetate.—Supplies scarce, offerings small. Prices without change

Alumina Chloride.—Market position tight. Prices rule firm.

Chrome Acetate.—Demand steady. Market position firm.

Potash Bichromate.—Business allocated to regular consumers. Prices rule firm.

Potash Prussiate.—Situation tight. Prices underwent no change.

Soda Bichromate.—Demand steady, and offerings remained limited. Prices unchanged and firm.

Soda Prussiate.—Active inquiry; business confined to usual channels. Prices display firmness.

Dyestuffs

Annatto.—Dealings routine. Prices failed to change.

Fustic.—A moderate replacement demand prevailed to keep market firm.

Price Changes

Advanced

Blood albumen, dark, ½c. per lb.
Egg albumen, 5c. per lb.

Reduced

Sago flour, ¼c. per lb.
Tapioca flour, ⅝c. per lb.

Comparative Values

Index numbers compiled from nineteen typical dyestuffs on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
248.6	245.7	245.3	149.5

Market news that may have developed after this report was sent to press will be found on page 4.

Hypernic.—Usual consumers entered market for moderate quantities.

Indigo.—Trading narrow. Prices held at previous levels.

Logwood.—Interest steady. A firm price tone remained in evidence.

Turmeric.—Spot offerings limited. Prices were firm.

Sizing Materials

Albumen, Blood.—Prices for dark advanced ½c. ranging from 11½c. to 15½c. per pound, according to quantity. Demand heavy.

Albumen, Egg.—Domestic and imported prices advanced 5c., ranging from $1.75 to $1.80 for crystals. Supplies light.

Corn Sugar.—Bookings steady. No change developed in the quotations.

Dextrin, Corn. — Good interest. Prices retained their firmness.

Egg Yolk.—Prices unchanged and firm. Inquiries and supplies only moderate.

Sago Flour.—Prices range from 4½c. to 5c. per pound. Shipments continued favorable from primary centers.

Starch, Corn.—Buying active. Price-wise a firm tone prevailed.

Starch, Potato.—Preparations now under way for seasonal production. Prices lacked any change.

Starch, Rice.—Business moderately active. Prices held at previous levels.

Tapioca Flour.—Prices ranged from 4c. to 6½c. per pound, depending on quality and quantity. Demand good.

Tanning Materials

Chestnut Bark. — Active demand. Prices held unchanged and firm.

Cutch.—Business confined to regular consumers for normal needs.

Divi-Divi.—Inquiries fairly active, with shipments sluggish.

Gambier.—Spot stocks small. Prices held at same levels.

Hematine.—Buying moderate, and prices remain the same.

Hemlock.—Steady interest. Prices without change.

Mangrove Bark.—Market underwent no change and business was routine.

Myrobalans.—Prices for powdered extract withdrawn. Raw material supply cut off since the war.

Nutgalls.—Alleppo quoted at 28c. per pound, while Chinese held nominal at 30c. per pound.

Oakbark.—Shipments moved steadily against contracts. Prices held firm.

Quebracho. — Good demand. No change developed in the prices.

Spruce. — Market position tight. Prices held the same.

Wattle Bark.—Business moderately active. No change in the quotations.

Resale Markets

Business in the resale market was confined to only a few offerings last week. It was more difficult to secure any quantities of soda bichromate and offerings ranged from 25c. to 28½c. per pound; potash bichromate was from 23c. to 25½c. per pound. Soda Prussiate ranged from 20c. to 25c. per pound and potash prussiate, yellow, 34c. to 40c. per pound.

Zinc Dust

Following the recent advance in the prices for primary zinc as the result of the OPA price ceiling, the OPA approved a new base price for zinc dust of 10.35c. per pound delivered in car lots and 11.35c. per pound for less car lots, f.o.b. works. Previously producers of zinc dust had maintained a base price of 9.5c. per pound, delivered, in car lots. Zinc dust produced on the Pacific Coast made from slag zinc carries a top price of 12¼c. to 13¼c. per pound.

The new price basis will probably assure a continued high level of production. Production currently is running at the level of 2,100 tons monthly from zinc dross. Production in 1939, latest comparative figures, totaled only 16,835 short tons, however, this was 45 percent above the 11,609 tons produced in the 1938 period.

While zinc dust was subject to a 10 percent emergency pool allocation during the month of September, no such regulation was imposed by the OPM during October. The same situation will prevail during November.

In conformity with the higher quotations established for the primary metal, zinc dust prices advanced gradually during the past two years. Prices before the war on a delivered basis ranged from 6¾c. to 7¼c. per pound.

Current prices on dyestuffs and tanstuffs are given in the alphabetical list of prices beginning on page 7

Association meetings:—

Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

DARLING'S
STEARIC ACID
OLEIC ACID
RED OIL
FATTY ACIDS
DARLING & COMPANY Manufacturers
4203 South Ashland Avenue • Chicago

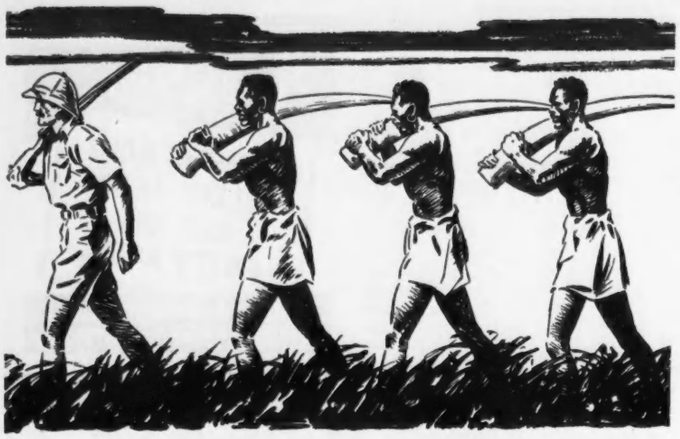
Natural Products Refining Co.
910 Garfield Avenue,
Jersey City, N. J.
Natural
Natural BICHROMATES

ALBUMENS
In Stock . . . For Immediate Delivery
THE LARGEST MANUFACTURERS AND EXPORTERS OF TECHNICAL EGG PRODUCTS OFFER YOU EGGS, LIQUID OR DRIED, IN ANY FORM FOR EVERY INDUSTRIAL USE.
H. GARTENBERG & CO., Inc.
412 W. PERSHING ROAD CHICAGO, ILLINOIS
Write for Samples and Quotations Cable Address: "GARTEGG"

SODIUM ACETATE
—GRADES AVAILABLE—
Technical 60% Sodium Acetate
Anhydrous Sodium Acetate, 98-99.5%
Sodium Diacetate
(33-35% Acidity as Acetic Acid)
Anhydrous Sodium Diacetate
(40-41% Acidity as Acetic Acid)
NIACET CHEMICALS CORPORATION 4703 PINE AVE., NIAGARA FALLS, NEW YORK

MUTUAL BICHROMATES
BICHROMATE OF SODA
•
BICHROMATE OF POTASH
•
CHROMIC ACID
MUTUAL CHEMICAL CO. OF AMERICA MUTUAL NEW YORK N.Y.
MUTUAL CHEMICAL COMPANY OF AMERICA
270 Madison Avenue, New York City

TO THE SUDAN FOR IVORY...



TO BARRETT FOR COAL-TAR CHEMICALS

PHENOL
CRESOLS
CRESYLIC ACIDS
XYLENOLS
TAR ACID OILS
NAPHTHALENE
(Industrial and household)
PHTHALIC ANHYDRIDE
CUMAR*
(Paracoumarone-Indene Resin)
RUBBER COMPOUNDING MATERIALS
COAL-TAR BASES
(Pyridine, Quinoline, Picolines, etc.)
PICKLING INHIBITORS
BENZOL
TOLUOL
XYLOL
SOLVENT NAPHTHA
HI-FLASH SOLVENT
FLOTATION REAGENTS
ANHYDROUS AMMONIA
HYDROGENATED COAL-TAR CHEMICALS
Cyclohexane 98-100%
Methylcyclohexane 98-100%
Cyclohexanol 98-100%
Methylcyclohexanol 98-100%
Cyclohexanone 98-100%
Methylcyclohexanone 98-100%

THE BARRETT COMPANY
40 RECTOR STREET NEW YORK, N. Y.
ONE OF AMERICA'S GREAT BASIC BUSINESSES

SEND FOR THIS BOOKLET
This 36 page, pocket-size booklet lists the many important Barrett Chemicals, and provides a fingertip reference of concise descriptions and uses for each product. We will gladly send your copy on request. No obligation.

Barrett CHEMICALS

*Trademark Reg. U. S. Pat. Off.

Coaltar Chemicals

Coal Strike Settlement Eliminates Fear of Steel Curtailment —Defense Buying Heavy in Coaltar Solvents and Tar Acids —Raw Material Shortage Felt in Various Intermediates

A compromise settlement of the captive coal mine strike was an encouraging factor last week. Intervention by the President effected an agreement to reopen the mines immediately. The entire matter will be referred to the National Defense Mediation Board. Steel operations last week were scheduled at 99.9 percent of capacity. Only a slight recession was expected to occur as a result of the coal strike, since only a few blast furnaces were forced out of operation.

Substantial quantities of basic materials moved for defense purposes. Benzol, cresylic acid, naphthalene, phenol, toluol and xylol were in heavy demand. A number of coaltar acids, colors and intermediates continued to feel the effects of the scarcity in raw materials. After providing for priorities, sellers were forced to allocate supplies to regular consumers. It was increasingly difficult to obtain any supplies from outside sources. Business in the export market was tempered by the domestic situation. No new price developments occurred, but sellers were giving attention to next year's contract schedules.

Price Changes

Advanced
None

Reduced
None

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
128.5	128.5	128.5	127.1

Market news that may have developed after this report was sent to press will be found on page 4.

Basic Products

Benzol.—Market position firm. Demand continued active.

Carbazole.—Shpiments steady. Pricewise a firm tone predominated.

Coaltar.—Movement of crude and refined well sustained. Prices rule the same.

Creosote Oil.—A good replacement demand prevailed. Pricewise a firm tone governed the dealings.

Cresols.—Business usually allocated to take care of regular consumers. Prices without change and tone firm.

Cresylic Acid.—Domestic producers continued under pressure to make all deliveries; supplies of imported remain limited. Price tone very firm.

Naphthalene.—Movement of crude steady and supplies well absorbed. Tight situation in refined grades. Prices unchanged and firm.

Phenol.—Increasing defense demand keeps market in sold-up position. Business allocated. Prices retain a firm tone.

Pitch, Coaltar.—Market position firm and interest steady.

Tar Acid Oils.—Available output well taken to keep market in tight position.

Toluol.—Defense needs remain high, and bulk of material moving in this channel. Prices underwent no change.

Xylol.—Market position remained tight and selling was limited. Prices firm.

Chicago.—Ruling prices exclusive of tax are:—Benzol, 90 percent, 14c. to 15c. per gallon; motor benzol, 8c. to 9c. per gallon; toluol, 27c. per gallon; 10-degree xylol, 26c. per gallon; solvent naphtha, 26c. per gallon; creosote oil, grade 1, 13½c. to 14c. per gallon.

Hydrogenated Products

Cyclohexane.—Buying steady and market position firm.

Cyclohexanol.—Consumers made a steady appearance, while prices were well sustained.

Methylcyclohexanone.—A good interest prevailed. Price tone firm.

Coaltar Acids

Anthranilic.—Offerings limited as inquiries remain steady. Prices were the same.

Benzoic.—Tight situation characterized market. Prices underwent no change.

Broenner's.—Call routine. Prices unchanged and firm.

Cleve's.—Shipments steady to regular channels. Prices lacked change.

Fumaric.—Inquiries and shipments held at active levels. Prices unaltered.

Gamma.—Purchases were moderate, while prices held at previous levels.

H.—Market strictly a routine affair. Prices lacked any new developments.

Laurent's.—Withdrawals moderate. No change disclosed in the prices.

Maleic.—Active defend, sellers unable to take care of all inquiries. Prices rule firm.

Malic.—Shipments moderately active. Pricewise a firm tone prevailed.

Picramic.—Firm conditions evident and buying held steady.

Picric.—Defense needs take bulk of material. Prices were firm.

Salicylic.—Brisk inquiry, with supplies limited. Prices firm.

Sulphanilic.—Business confined to regular channels as a rule. No change occurred in the quotations.

Tobias.—Market position strong. No let up occurred in the demand.

Benzoic Acid

Despite efforts to expand production of benzoic acid since the beginning of the war, domestic supplies were not adequate to take care of all inquiries. While producers were able to supply regular contract consumers, other demands were usually turned down. The material finds its widest use in the preservative field, especially in foods and beverages, and to a lesser extent in manufacturing dyes and certain intermediates.

Production will necessarily depend upon obtaining raw materials such as naphthalene, benzol and toluol. Output of technical material in 1940 reached 318,849 pounds and sales 281,202 almost double the amount made in 1939 of 177,983 pounds.

Before the war Germany supplied most of the export market, and during the early part of the war this country exported a great deal of benzoic acid. The tightening in domestic supplies has eliminated much of the export business from here.

During the last war prices reached a level of $9 per pound, but so far there were no indications of any such conditions existing today. A price for export reached the figure of $1.07 per pound. Producers maintain schedule for technical grades at 43c. to 47c. per pound, according to quantity.

Current prices on coaltar products are given in the alphabetical list of prices beginning on page 7

Association meetings:—
Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

Other Intermediates

Alphanaphthol. — Business steady and market in firm position.

Anilin.—Supplies remain scarce. Defense needs big factor. Prices firm.

Anthraquinone. — Active demand from dyestuff manufacturers. Prices the same.

Benzaldehyde. — Technical grades moved in good volume to keep market in very firm position.

Benzine Base.—Shipments steady against contracts. Prices failed to change.

Betanaphthol.—Defense and civilian needs absorb available offerings. Prices were without change.

Diethylanilin.—Withdrawals moderate and tone of market firm.

Dimethylanilin.—Situation failed to improve as supplies tighten under defense pressure. Prices rule firm.

Dinitrobenzene.—Firm situation evident. Demand steady.

Dinitrophenol.—Available offerings well absorbed. Prices retained their firmness.

Dinitrotoluene.—Defense needs continued major factor in keeping market in sold up position.

Diphenyl.—Prices unchanged and firm. Demand active.

G. Salt.—Routine conditions surround the trading. Prices were without alteration.

Metanitroparatoluidin.—Tight conditions still evident as consumers absorb all offerings.

Monochlorobenzene.—Defense needs taking good-size quantities to keep market in tight position.

Nitrobenzene.—Shipments moved actively as sellers restrict offerings. Prices unchanged.

Orthoanisidin.—Buying held at active levels, while prices underwent no change.

Orthochloroanilin.—No let-up in the demand. Pricewise a firm tone predominated.

Orthonitrotoluene.—Active inquiries. Market position strong.

Orthotoluidin.—Sellers under press-

—Continued on page 69

American Can Revamps Sales Administration

The American Can Company announces that it has affected changes within its organization so that hereafter the administration of both packers can and general line sales, in all districts east of the Rocky Mountains, will be through two new sales division

J. J. Lynch

H. H. Howry

offices, to be known as the Atlantic division sales office, located in New York, and the central division sales office in Chicago.

Under this new arrangement, the Northeast district and the Atlantic district packers can slaes will continue to function as before, responsible to the Atlantic division sales office in New York. The Atlantic district general line sales department will be discontinued as such and will become a part of the Atlantic division sales office. The central district packers can and general line sales will be merged as the new central division sales office.

The following changes among the personnel were announced as resulting from this reorganization:—

R. M. Roberts, formerly assistant general manager of sales, packers can, has been appointed manager of sales, Atlantic division. H. H. Howry, formerly district salesmanager, Atlantic district, packers can, has been appointed assistant manager of sales, Atlantic division. F. G. Jewett, formerly assistant to district sales manager, Atlantic district, general line, has been appointed assistant manager of sales, Atlantic division. T. E. Alwyn, formerly sales division manager, Atlantic district, general line, has been appointed assistant manager of sales, Atlantic division.

J. J. Lynch, formerly district salesmanager, central district, packers can, has been appointed assistant to the vice-president, in charge of the Central division. H. A. Pinney, formerly district salesmanager, Central district, general line, has been appointed manager of sales, Central division. L. W. Graaskamp, formerly assistant district salesmanager, Central district, packers can, has been appointed assistant manager of sales, Central division. M. J. Eberhart, formerly assistant district salesmanager, central district, general line, has been appointed assistant manager of sales Central Division.

H. A. Pinney

R. M. Roberts

Toluol Output by Shell To Reach 8,000,000 Gallons

R. G. A. van der Woude, president of the Shell Union Corporation, in his quarterly report to stockholders, said that upon completion of the company's third toluene plant near St. Louis early next year the company's total output will be 8,000,000 gallons annually. He also said that new plants have been completed and are under construction to produce alkylate, isooctane, isobutane and isopentane.

Textile Chemists Year Book for 1941 Ready

The American Association of Textile Chemists and Colorists has just issued its 1941 Year Book. Part I of this publication contains a list of national and sectional officers, standing committees, research committees and reports of both the annual national meeting and sectional meetings.

Part II contains reports of the past year's accomplishments of the research committee and its thirty-six sub-committees. Part III lists the standard methods for determining the fastness of dyestuffs on the fiber as well as many other tests. Part IV containing lists of dyestuffs and textile chemical specialties has been extended to cover new products. Part V consists of the membership list given alphabetically as well as geographically.

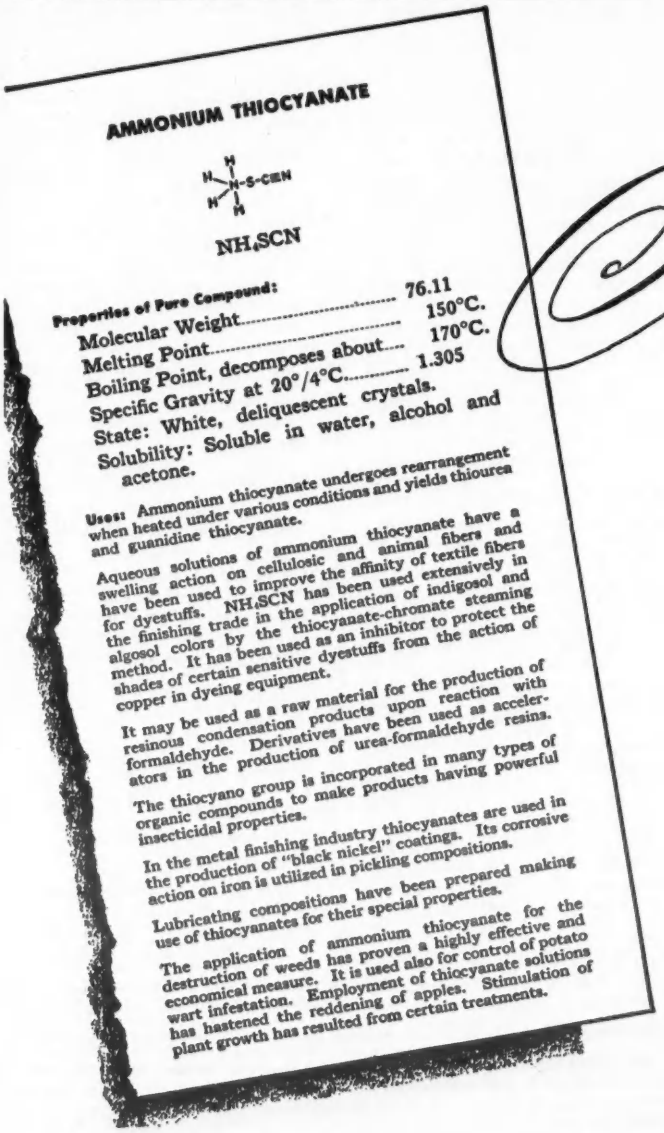
Copies of this publication may be obtained from Dr. Harold C. Chapin, secretary of the AATCC, Lowell Textile Institute, Lowell, Mass., for $3.50 postpaid.

Baytown Toluol Plant Production Started

OPD Washington Bureau
October 28, 1941

Baytown Ordnance Works in Texas has begun production of toluol by one of the new scientific processes that establish petroleum as a source capable of meeting all conceivable military requirements for toluol.

The first two carloads of toluol manufactured at Baytown, twelve miles south of Houston, were shipped October 22 to a TNT plant, one day less than a year from the date of approval of the contract with the Humble Oil & Refining Company, Houston, Texas.


AMMONIUM THIOCYANATE
NH₄SCN
Properties of Pure Compound:
Molecular Weight 76.11
Melting Point 150°C.
Boiling Point, decomposes about 170°C.
Specific Gravity at 20°/4°C. 1.305
State: White, deliquescent crystals.
Solubility: Soluble in water, alcohol and acetone.
Uses: Ammonium thiocyanate undergoes rearrangement when heated under various conditions and yields thiourea and guanidine thiocyanate.
Aqueous solutions of ammonium thiocyanate have a swelling action on cellulosic and animal fibers and have been used to improve the affinity of textile fibers for dyestuffs. NH₄SCN has been used extensively in the finishing trade in the application of indigosol and algosol colors by the thiocyanate-chromate steaming method. It has been used as an inhibitor to protect the shades of certain sensitive dyestuffs from the action of copper in dyeing equipment.
It may be used as a raw material for the production of resinous condensation products upon reaction with formaldehyde. Derivatives have been used as accelerators in the production of urea-formaldehyde resins.
The thiocyano group is incorporated in many types of organic compounds to make products having powerful insecticidal properties.
In the metal finishing industry thiocyanates are used in the production of "black nickel" coatings. Its corrosive action on iron is utilized in pickling compositions.
Lubricating compositions have been prepared making use of thiocyanates for their special properties.
The application of ammonium thiocyanate for the destruction of weeds has proven a highly effective and economical measure. It is used also for control of potato wart infestation. Employment of thiocyanate solutions has hastened the reddening of apples. Stimulation of plant growth has resulted from certain treatments.

Can you use

Ammonium Thiocyanate

(Ammonium Sulfocyanide)

at substantially lower cost?

Koppers has placed in operation a large commercial plant for the production of ammonium thiocyanate crystals. Supplies are now available in quantities not obtainable before and at costs which make ammonium thiocyanate practical for purposes for which it has not been used in the past.

Chemists and Manufacturers who have previously investigated the possibilities of Ammonium Thiocyanate should reconsider its use in view of this increased supply and reduced cost.

Koppers Ammonium Thiocyanate can be supplied in crystal form, having minimum purity of 95%.

Samples, Quotations and Further Information on Request

KOPPERS COMPANY
TAR AND CHEMICAL DIVISION
PITTSBURGH, PENNSYLVANIA

STEARIC ACID

Single Pressed and Double Pressed

Available in either cake or flake form

Triple Pressed
IVORY BRAND

RED OIL
(OLEIC ACID)

RUBY OLEINE BRAND *(distilled)*
STAR BRAND *(saponified)*
CANARY BRAND
(very pale yellow, especially suitable for best types of dry cleaners' soaps.)

PROCTER & GAMBLE
MAIN OFFICES
Gwynne Bldg., Cincinnati, Ohio
220 East 42nd St., New York City
Branches and stocks in all large cities

DISTILLED
FATTY ACIDS
Tallow Fatty Acids
Cocoanut Fatty Acids
Cottonseed Fatty Acids

HYDROGENATED FATTY ACIDS
(Rufat 52)

STEARIC ACID

RED OIL
(Oleic Acid)

WILSON & CO. INC
WILSON-MARTIN DIV.
SNYDER AND SWANSON ST.
PHILADELPHIA, PA.

Buyers prefer Oil, Paint and Drug Reporter

MARKET INFORMATION

because it is Accurate and Definite

Stearic Acid Oleic Acid Fatty Acids
(RED OIL)
A. GROSS & CO., 295 Madison Avenue, New York, N. Y.
ESTABLISHED 1837 ASHLAND 4-8251
FACTORY: NEWARK, N. J.
CABLE: GROSSRAY

W. C. HARDESTY CO., Inc.
41 East 42nd Street New York

RED OIL STEARIC ACID
Saponified - Distilled

HYDROGENATED FATTY ACIDS (HYDREX)

Cottonseed Oil Fatty Acids
Palm Oil Fatty Acids
Lauric Acid
Coconut Oil Fatty Acids
Corn Oil Fatty Acids
Specialty Fatty Acids

Glycerine - Pitch - White Oleine

FACTORIES: Dover, Ohio - Los Angeles, Calif. - Toronto, Canada
CALIFORNIA OFFICE: 5636 East 61st Street, Los Angeles
Cable Address: "EPILOGUE"

EMERY

America's largest producers of
STEARIC and OLEIC ACIDS
All Grades Saponified and Distilled
FATTY ACIDS • GLYCERINE • PITCH
SPECIAL FATTY ACID DERIVATIVES
Since 1840
EMERY INDUSTRIES, INC.
Originators of Twitchell Process
New York CINCINNATI, OHIO Lowell, Mass.
Stocks in All Principal Cities

Oil, Fats, and Waxes

Refined Cottonseed Oil, Lard and Soybean Futures Rally After Early Decline—Southern Crude Oil Offerings Still Limited — Coconut Oil Firmer — Business Quiet

The general market for vegetable, animal and fish oils, fats and greases remained quiet last week. A fair request was noted for some edible and imported products, but in many cases buyers were still inclined to hold aloof or limit their purchases to small lots pending further developments at Washington in the matter of price and other legislation as well as in the situation abroad. Refined cottonseed oil, lard and soybean futures were irregular, declining early and then moving upward but developments in these markets were not of a kind to stimulate purchases of other oils and fats. The price trend was downward, changes being comparatively few with the prevailing tone steadier late in the week in the absence of any increase of consequence in offerings.

Vegetable Oils

Castor, Dehydrated.—Contract movement steady and large. New business good. Tone firm.

Chinawood.—Inquiry fairly active. Offerings light. Market firm.

Coconut.—Crude advanced ⅛c. Offerings light. Prices nominal. Refined advanced ½c. Inquiry fairly active.

Corn.—Crude and refined quiet. Offerings light. Nominal quotations shaded ¼c.

Oiticica.—Trade quieter. Quotations shaded ¼c.

Olive.—Supplies light. Trade quieter. Tone firm.

Perilla.—Quiet and steady. Spot stocks small.

Rapeseed. Trade less active. Quotations reduced ¼c.

Soybean. — Beans irregular. Oil trade fairly active. Spot quotations generally steady.

There was no trading in soybean oil futures on the New York Produce Exchange from October 25 to October 31, inclusive. Following is a price record for the week:—

	Cents per pound in tanks— High.	Low.	Close.
May	...	...	10.50 bid
December	...	...	10.50 bid

Price Changes

Advanced

Coconut oil, crude, ¼c. per lb.
refined, ½c. per lb.
Palm oil, ½c. to ¼c. per lb.

Reduced

Corn oil, ¼c. per lb.
Oiticica oil, ¼c. per lb.
Peanut oil, ¼c. per lb.
Rapeseed oil, ¼c. per lb.
Soybean meal, $5 per ton.

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
170.2	**171.4**	**175.1**	**95.8**

Market news that may have developed after this report was sent to press will be found on page 4.

Markets at Other Centers

Chicago—Oct. 31

Vegetable oils quiet.

Coconut.—Refined, edible, 13¼c. to 13½c. pound, drums, car lots; 13¾c. to 14c., less car lots.

Corn.—Crude, mills, 11½c. to 11¾c. pound, tanks. Refined, edible, 15c. to 15¼c., drums, car lots; 15½c. to 16., less car lots.

Soybean. — Crude, October-forward, 9⅞c. to 10c. per pound.

The market for soybeans on the Chicago Board of Trade was active and irregular. Following is a soybean price record, per bushel, for the week:—

	High.	Low.	Closing Oct. 31.	Closing Oct. 24.
December	$1.65	$1.51	$1.64½	$1.59⅝
May	1.69½	1.55½	1.69	1.64⅝

San Francisco—Oct. 29

Vegetable oils quiet. Supplies small.

Coconut.—Sales into next year at 6⅝c. pound, tankcars, f.o.b. Pacific Coast.

Chinawood.—Sales at 34¼c. pound, tankcars.

Oiticica. — Market temporarily disrupted by indication of lower prices from new shipper.

Babassu.—Oil nominally 9½c. pound, tankcars.

Castor, Crude.—Quoted 12¼c. pound, tankcars, f.o.b. Los Angeles.

Linseed Oil

Domestic flaxseed prices firmer. Linseed oil quiet. Meal lower.

Flaxseed—Duluth, Oct. 31.—Flaxseed steadier with other markets. Receipts of poor quality, due to rains.

The week's closing flaxseed price range was as follows:—

	Cash.	Dec.
Saturday	$1.75	$1.78
Monday	1.75	1.77½
Tuesday	1.77	1.80
Wednesday	1.79	1.82
Thursday	1.78½	1.81½
Friday	1.79½	1.82¾

Crop movement in bushels follows:—

	Receipts— 1941.	1940.	Shipments— 1941.	1940.
This week	209,240	92,083	384,340	176,914
Since Aug. 1.	2,481,647	4,382,305	1,909,260	2,491,684

Minneapolis, Oct. 31.—Flaxseed receipts moderate. Demand good, except for wet seed. More seed is diverted to head of lakes or used in East to mix with Argentina seed. Mills using much more seed than last year. Futures bought on report Argentina may raise minimum flax price 30 cents per bushel.

Peanut Oil

Domestic peanut oil remained at abnormally high prices last week, crude being quoted at around 12c. per pound at mills, with this figure nominal in the absence of any increase in offerings. At this time last year 4⅞c. was quoted while in 1939 the prevailing quotation was 7c. Refined oil was also in light supply and nominal at 15¾c. per pound locally against 7¾c. and 10½c. respectively in the two preceding years. The peanut crop was officially estimated on October 1 at 1,480,280,000 pounds, or about 15 percent less than the record crop of 1,734,000,000 pounds in 1940.

Production of crude peanut oil during the first half of the current year, according to official statistics, was 108,803,000 pounds against 20,978,000 pounds in the same time last year and 60,288,000 pounds two years ago. Consumption for the first six months of 1941 was 110,406,000 pounds against 18,439,000 pounds in the first half of 1940 and 56,369,035 pounds in 1939. Production of refined oil in the first half of the current year was 95,951,000 pounds against 17,006,000 pounds in the same time last year and 54,068,688 pounds in 1939. Consumption of refined oil during the first six months of 1941 was 54,284,000 pounds against 14,964,000 pounds in the same time last year and 32,854,497 pounds in 1939.

Current prices on animal, vegetable, and fish oils (under Oil), fats and greases (under Grease) are given in the alphabetical list of prices beginning on page 7

Association meetings:—

Flax Institute, annual meeting, Minneapolis, Nov. 21.
Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

The week's closing flaxseed price range was as follows:—

	Cash.	Dec.	May.
Saturday	$1.80	$1.78	$1.83
Monday	1.80	1.78	1.83½
Tuesday	1.82	1.80	1.85½
Wednesday	1.84	1.82	1.87¼
Thursday	1.83½	1.81½	1.86½
Friday	1.84½	1.82⅛	1.87½

Crop movement in bushels follows:—

	Receipts— 1941.	1940.	Shipments— 1941.	1940.
This week	260,400	147,000	22,400	54,600
Since Sept. 4	5,672,600	6,848,000	540,200	656,700

Winnipeg, Oct. 31.—The week's closing flaxseed price range was as follows:—

	Cash.	Dec.	May.
Saturday	$1.44⅝	$1.44⅛	$1.47½
Monday	1.42¼	1.42⅝	1.47
Tuesday	1.42⅝	1.42⅜	1.46
Wednesday	1.45⅛	1.45¼	1.48½
Thursday	1.44½	1.44⅜	1.47⅜
Friday	1.46¾	1.46⅝	1.49⅜

Buenos Aires, Oct. 31.—Flaxseed, November, 85⅝c. per bushels. Exports this week 539,000 bushels, including 469,000 to the United States. Total since January 1 as follows:—

To—	Bushels— This year.	Last year.
United States	18,563,000	10,755,000
United Kingdom	2,113,000	5,896,000
Continent	977,000	11,856,000
Orders	.....	606,000
Others	1,395,000	1,154,000
Totals	23,048,000	30,267,000

Visible Supply

	Bushels.
Last week	25,591,000
Previous week	24,803,000
Last year	4,724,000

Hull, Oct. 31.—Flaxseed, La Plata, £12¾ per long ton; Calcutta £19½.

Linseed Oil.—Quiet conditions continued to prevail here last week. There was a steady movement on contracts but new business remained slow, many consumers and dealers still being disposed to adhere to a waiting attitude pending further developments in the Argentina situation as well as in the markets for other commodities. The trend of flaxseed was upward at times and the local oil market had a steady tone. A good demand was reported for dry flaxseed in Northwestern markets. Frosts were noted in Argentina.

Minneapolis, Oct. 31.—Spot linseed oil fairly active. Futures quiet. Contract movement heavy. Tankcars, 9.7c. per pound; cooperage, car lots, 10.6c.; warehouse lots, 11c.

Shipments of oil in pounds were as follows:—

	1941.	1940.
This week	3,850,000	3,400,000
Since Sept. 1	43,150,000	34,350,000

San Francisco, Oct. 29.—Linseed oil quiet. Reported 40,000 tons Argentine seed purchased here. Tankcars 9.5c. per pound; drum lots, ex mill, 10.4c.

London, Oct. 24.—Linseed oil, 41s. 6d. per cwt.

Cake and Meal.—Fair movement of meal on contracts. New business quiet. Quoted $30 per ton.

Minneapolis, Oct. 31.—Linseed meal quiet. Supplies increased. Car lots, $34 to $36 per ton, bags.

Shipments of meal in pounds were as follows:—

	1941.	1940.
This week	7,880,000	5,920,000
Since Sept. 1	86,850,000	58,601,000

Cottonseed Oil

Refined oil futures declined early and then rallied. Trading quiet. Southern offerings of cottonseed products continued light.

Cottonseed Oil.—A continuation of irregular price movements was noted in the local market for refined oil futures, the general trend being downward early in the week after which there was an upturn. Sentiment among not a few still appeared to be rather bullish but depressing war news, weakness and irregularity in outside markets and uncertainty concerning legislation at Washington had a tendency to discourage anything like aggressive buying although commission houses and local traders as well as shorts bought on weak spots. Trade interests were credited with operations on both sides of the account.

There were further moderate tenders on October contracts. The open interest in the market on October 28 was 1,734 contracts against 1,594 a week earlier. It was intimated in Washington advices that no ceiling prices would be fixed in the near future for farm products. This report caused some buying. Crude oil offerings continued light with reports of scattered transactions at from 11½c. to 11¾c. per pound. Seed was quoted at $48 per ton. The weight of the hogs received in Chicago during the week ended October 25 averaged 224 pounds, the same as in the previous week. The quantity of cotton ginned to October 18 was 6,855,808 bales against 7,027,189 bales in the same time last year when the crop was 12,299,708 bales.

Trading in bleachable prime Summer yellow cottonseed oil futures on the New York Produce Exchange from October 25 to October 31, inclusive, comprised 573 contracts. Following is a price record for the week:—

	Cents per pound in tanks— High.	Low.	Close.
January	12.88	12.42	12.61 sale
March	12.92	12.35	12.71 sale
May	12.92	12.35	12.70 sale
December	12.81	12.28	12.61@12.64

Crude, Southeast, 11¾c. Nom.

Chicago, Oct. 31.—Cottonseed oil quiet. Refined, edible, 15¾c. to 16c. pound, drums, car lots; 16¼c. to 16½c. less car lots.

Hull, Oct. 24.—Cottonseed oil, refined, 36s. 6d. per cwt.; crude, Egyptian, 31s. 1½d.

Cake and Meal.—An increased inquiry for meal was noted in some Southern markets. Offerings generally light.

Markets at Other Centers

Atlanta—Oct. 29

Crude cottonseed oil, 11½c. per pound; meal, $37 to $37.50 per ton. Comparatively little cotton unpicked.

Memphis—Oct. 30

Crude cottonseed oil quiet, 11½c. bid; 11¾c. asked, Valley basis. Meal demand better; 41 percent, $36.50 per ton, Memphis basis. Cake $33 per ton, Valley basis. Hulls $5 per ton, mill points, prompt shipment. Fully 80 percent of cotton gathered this section. General seed price $48 per ton, prime. Soybean meal, $33.50 per ton, Decatur basis, November forward. Crude peanut oil 12¼c. per lb., Southeast. Closing cottonseed meal quotations on the Memphis exchange were as follows:—

	Oct. 23.	Oct. 30.
December	$35.55@35.80	$36.65@36.95
January	35.75@36.10	36.80@37.40
March	36.65@36.90	37.75@——
May	36.70@37.00	37.75@——

Closing soybean meal futures:—

December	$32.60@33.00	$32.80@33.40
January	32.75@——	32.65@33.00
March	32.75@——	32.65@33.00
May	32.60@33.00	32.75@32.95

Fatty Acids

Capric Acid.—Demand steady. Market firm.

Coconut Oil.—Buying generally conservative. Prices maintained.

Red Oil.—Steady with raw material. Demand good.

Soybean Oil.—Trade quieter. Buyers awaiting developments. Prices steady.

Stearic Acid.—Steady movement on contracts. Market firm.

Chicago—Oct. 31

Demand for fatty acids good. Corn oil, double distilled, 14¼c. to 14½c. per pound, tankcar; settled cottonseed soap stock, 60-62 percent basis, 3½c. to 3⅝c.; boiled down soap stock, 65 percent basis, 4½c. to 4⅝c.; cottonseed foots, 50 percent basis, 3½c. to 3¾c.

Fish Oils

Cod.—Primary offerings continued light. Quiet and firm here.

Sardine.—Local refined quotations steady. Fair small-lot inquiry.

Shark.—Spot supplies light. Market firm.

Markets at Other Centers

Baltimore—Oct. 29

Crude menhaden oil sold at 58c. per gallon. Later tone firmer; offerings withdrawn. Fishing results fair. Season here nearing end.

San Francisco—Oct. 29

Crude sardine oil sold 59c. gallon. Most sellers quoting 60c. California Sardine Products Institute reports oil production 6,065,654 gallons since Sept. 1, Monterey and San Francisco districts. Raw fish take 42,448 tons week October 24.

Fats and Greases

Grease.—Fair spot inquiry. Offerings light. Tone steady.

Chicago, Oct. 31.—Choice white grease, 8¾c. to 9c. pound; yellow, 8c. to 8¼c.

Lard.—Local cash trade fairly active. Price charges generally moderate.

Chicago, Oct. 31.—Following is a lard price record, per 100 pounds, for the week:—

	High.	Low.	Closing— Oct. 31.	Oct. 24.
Cash	$9.65	$9.25	$9.65	$9.50
December	9.79	9.27	9.70	9.62
March	11.30	10.71	11.22	11.15

Stearin.—Local inquiry fair. Offerings light. Market steady.

Tallow.—Increased request for small or moderate lots. Offerings light. Market steady.

Chicago, Oct. 31.—Prime tallow, 8¾c. to 9c. pound; special, 8¼c. to 8½c.

Animal Oils

Degras.—Demand fairly active. Spot stocks generally light. Market firm.

Lard.—Fair movement of moderate lots. Quotations maintained.

Neatsfoot.—All grades in demand. Supplies light. Raw material stocks below normal. Market firm.

Oleo.—Inquiry fairly active. Spot stocks light. Tone firm.

Waxes

Bees.—No less strong. Lack of African wax main cause of current position. Crude likely to remain strong. Demand excellent, especially for white bleached and refined yellow waxes, all of which appeared to be moderately supplied.

Candelilla.—Not a great deal of spot wax. Shipments fully a month behind. Demand maintained at excellent levels, reflecting high cost of carnauba.

Carnauba.—Less than the recent buying activity was reported here last week. Brazil changed little. Still appeared to be under excellent price control by the shippers. Market sensitive to resumption of heavy consuming request.

Japan.—Steady. Moving well. Little local competition. No imports in sight.

Resale Market

Crude coconut oil was firmer in the resale market following an advance in first hand price to 7⅝c. per pound. Reports were current of limited offerings of resale oil at 7¾c. to 7⅞c. per pound, with no transactions.

Margarin Production Decreased in August

Production of margarin in August totaled 24,803,025 pounds. This compared with 27,692,790 pounds in July and 21,663,786 pounds in August last year, according to statistics compiled by the Bureau of Internal Revenue, Washington. A comparison of August production with that of the preceding year follows:—

	Pounds— 1941.	1940.
Production of uncolored oleomargarine	*24,551,340	†21,481,135
Withdrawn tax-paid	25,126,325	22,476,917

Ingredients used in the production of colored and uncolored margarin in August, 1941, compared with August, 1940, follows:—

In Uncolored Margarin

	Pounds— 1941.	1940.
Babassu oil	.....	445,659
Coconut oil	2,354,112	1,100,071
Corn oil	42,926	.....
Cottonseed oil	10,114,808	8,259,796
Derivative of glycerin	52,638	62,588
Diacetyl	15	.....
Emulsol	157	.....
Lecithin	14,411	7,356
Milk	4,539,482	4,141,356
Monostearin	10,077	.....
Neutral lard	590,619	309,039
Oleo oil	1,197,802	1,102,247
Oleo stearin	161,610	281,803
Oleo stock	126,387	95,684
Palm oil	843,717	.....
Palm kernel oil	284,969	.....
Peanut oil	183,128	139,278
Salt	840,645	849,991
Soda benzoate	10,881	8,724
Soybean oil	3,937,937	5,467,838
Soybean stearin	115	.....
Vitamin concentrate	3,329	901
Totals	25,249,765	22,272,331
Production of colored oleomargarin	‡251,685	§182,651
Withdrawn tax-paid	47,924	21,202

In Colored Margarin

	Pounds— 1941.	1940.
Babassu oil	.....	140
Butter flavor	2	3
Coconut oil	67,195	80,360
Color	337	153
Corn oil	1	.....
Cottonseed oil	16,071	15,482
Cottonseed stearin	.....	840
Derivative of glycerin	410	458
Lecithin	29	77
Milk	42,432	37,758
Monostearin	309	.....
Neutral lard	7,605	4,611
Oleo oil	42,833	19,407
Oleo stearin	189	954
Oleo stock	5,775	2,099
Palm oil	3,537	.....
Peanut oil	2	35
Salt	8,843	7,942
Soda benzoate	113	58
Soybean oil	63,938	29,117
Vitamin concentrate	2	2
Totals	259,623	199,491

* Of the amount produced, 22,764 pounds were reworked.

† Of the amount produced, 25,256 pounds were reworked.

‡ Of the amount produced, 417 pounds were reworked.

§ Of the amount produced, 52 pounds were reworked.

B. H. Thurman, of Refining, Inc., vegetable oils, 2130 North Tyron street, Charlotte, N. C., has made application for membership in the New York Produce Exchange.

E. A. BROMUMD COMPANY

Beeswax
Carnauba Wax
Ceresine Wax
Ozokerite Wax

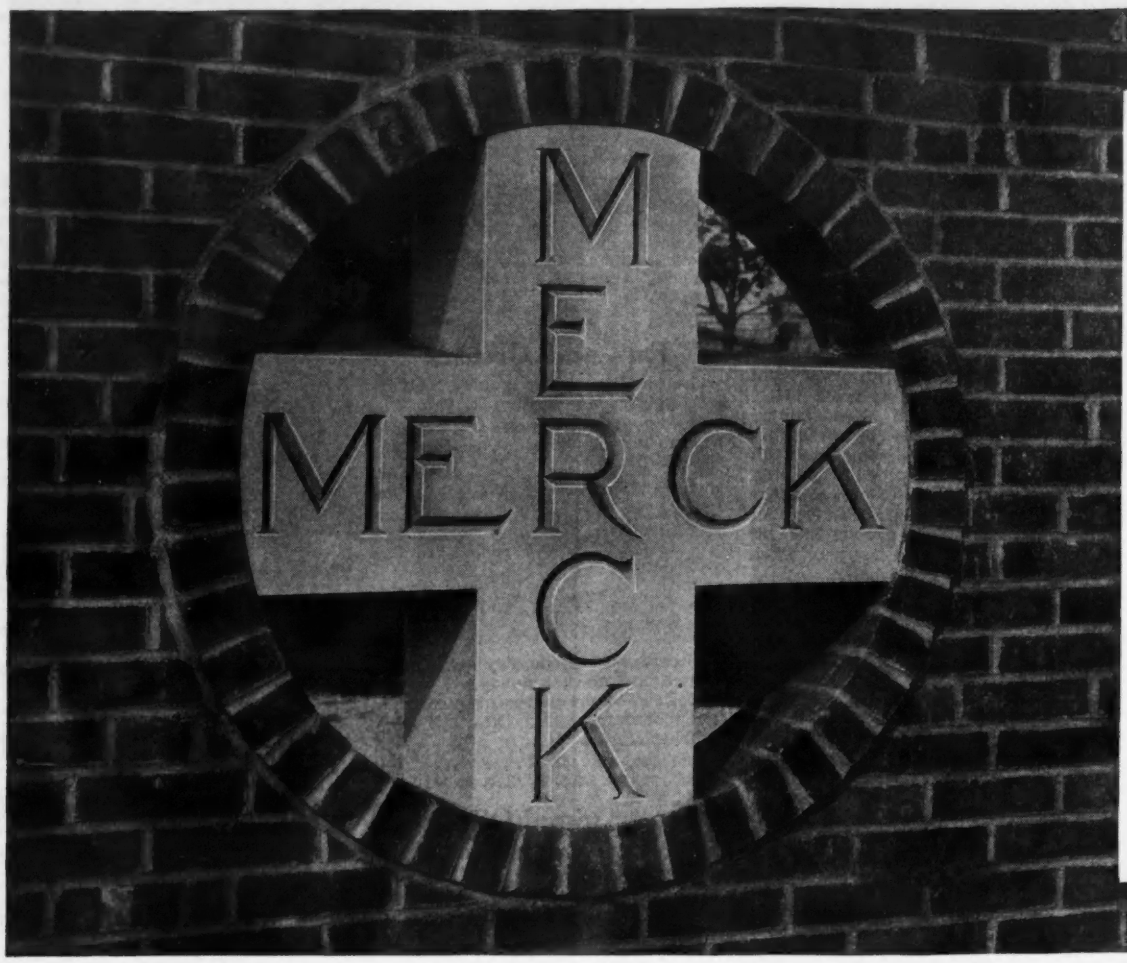
258 BROADWAY, NEW YORK CITY
BArclay 7-8445 Est. 1880

CHINA WOOD OIL
WAH CHANG TRADING CORPORATION
SPOT Woolworth Building New York, N. Y. FUTURE

THE BRODE CORPORATION
MEMPHIS, TENNESSEE
Domestic and Export
PRODUCTS OF COTTONSEED, PEANUTS and SOY BEANS
Members—Memphis Merchants Exchange (Futures in Cottonseed Meal)
New York Produce Exchange (Futures in Cottonseed Oil)
District Representatives
JAMES LOVATELLI & CO., 2 Broadway, New York City
Codes: Yopps, Robinsons, Bentleys A B C, 5th Edition Peerless

The best that can be produced. It is 100% PURE BEESWAX and measures up to all the requirements of the U. S. P.
SPECIFY TL BRAND
BEESWAX
THEODOR LEONHARD WAX CO., INC. (Dept. A)
Haledon ESTABLISHED 1852 Paterson, N J.

TALLOW
LARD OIL
NEATSFOOT OIL
ANIMAL STEARINE
ACIDLESS TALLOW OIL
INDEPENDENT MFG. CO.
Bridesburg P. O. Philadelphia, Pa.



A DEPENDABLE NAME FOR FINE CHEMICALS

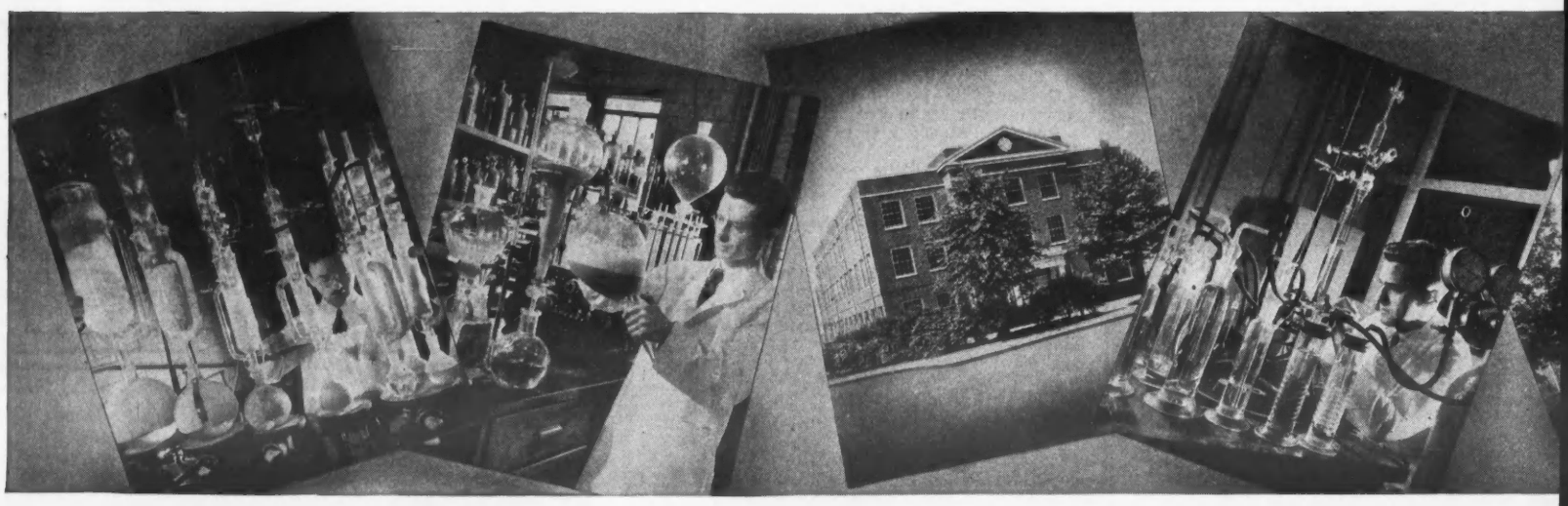
APPEARING on the labels of more than 1,500 products used by customers in many fields—including the United States Government, the Canadian Government, and the British Government under the Lend-Lease Act—the name Merck is recognized as a dependable name for fine chemicals.

This high recognition is convincing proof of how well Merck & Co. Inc., manufacturers of fine chemicals for the professions and industry since 1818, has maintained the confidence of those whom it serves.

The Merck policies of scientific research, and rigid laboratory control of purity and uniformity . . . fortified by a rich tradition of experience and modern production facilities . . . assure continued leadership in the present fields of chemistry, as well as in those still to be explored and conquered.

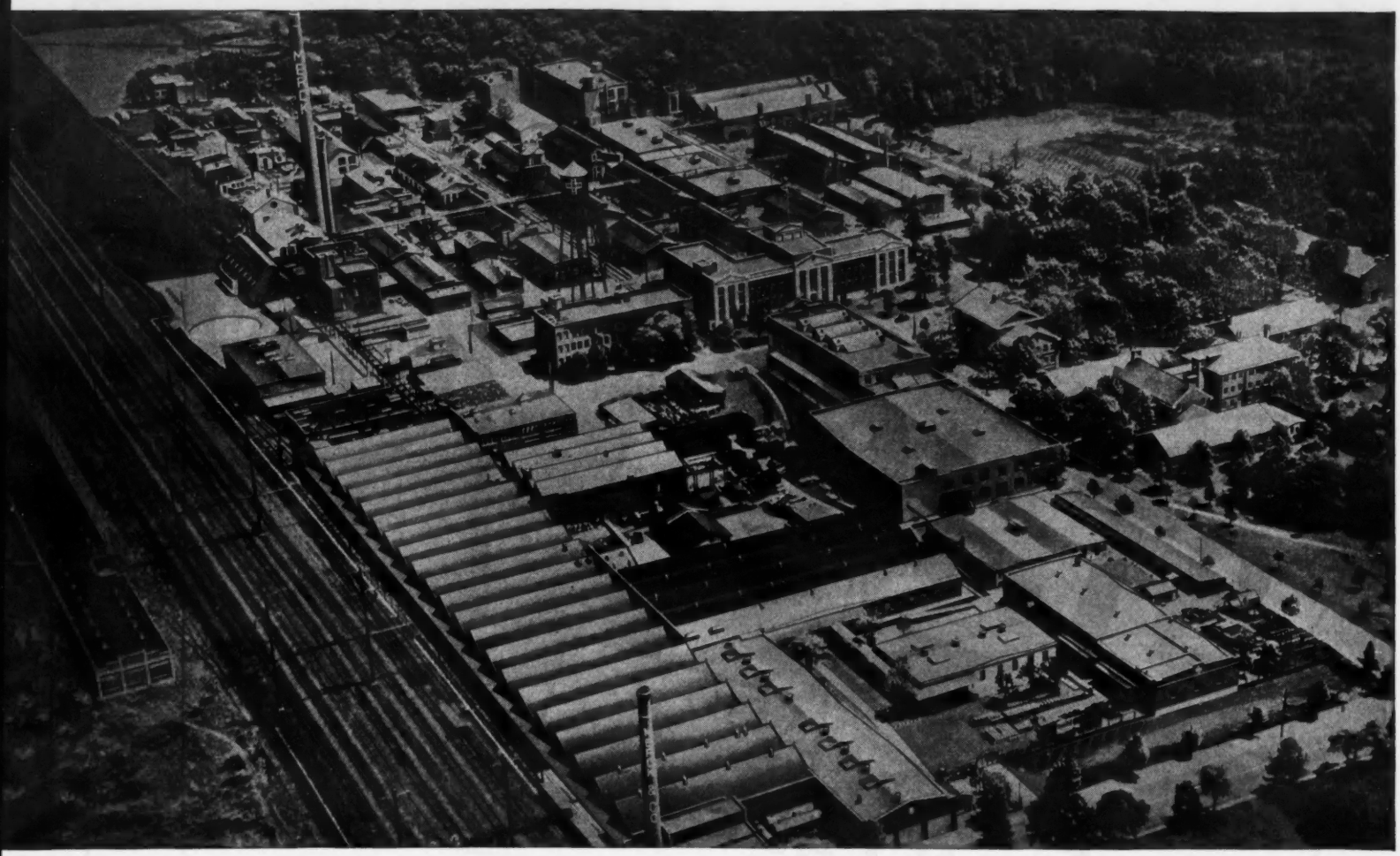
We invite you to write us regarding your manufacturing problems and requirements.
Our scientific staff and laboratories are prepared to serve you.

★ *The illustrations below, made at the Merck plant in Rahway, N. J., are representative of the widespre*



Alkaloidal extraction with Soxhlet apparatus • *Separation of enzyme concentrate fractions* • *View of the new Merck Analytical Laboratories Building* • *Chemical assay for Vitamin K*

MERCK & CO. Inc. *Manufacturing Chemists* **RAHWAY, N. J.**



● **Pioneers in the Development of New Synthetic Chemicals.** Active in the manufacture of new synthetic chemicals ever since their therapeutic uses were demonstrated. Merck has played a prominent rôle in the development of this important line.

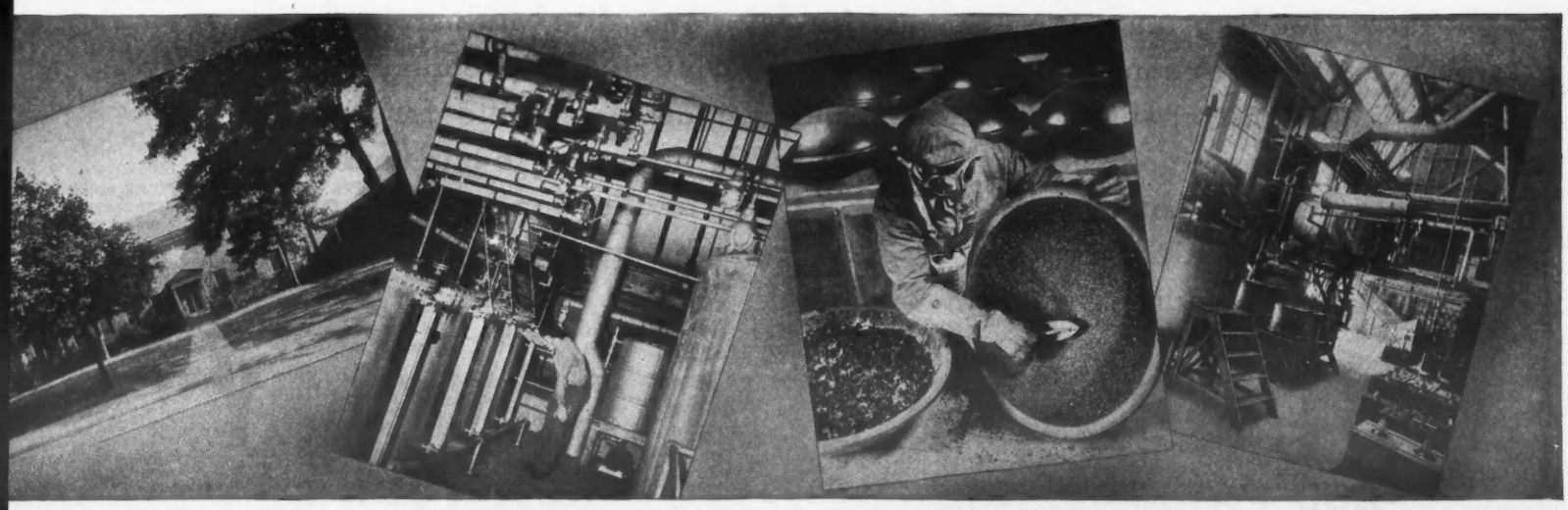
● **Original Large-Scale Producers of Many Fine Alkaloids.** The name Merck has been identified with the production of alkaloids and their salts for more than one hundred years.

● **Foremost in the Synthesis and Production of Pure Vitamins.** Discoveries and advances made in the vitamin field by Merck chemists and their collaborators, have continually emphasized the outstanding rôle played by Merck & Co. Inc. in the synthesis, development, and production of this therapeutically important line.

● **A Leader in the Production of Medicinal Chemicals.** Practically every chemical required by the physician or pharmaceutical manufacturer is available under the Merck label, and carries with it a guaranty of purity and reliability.

● **Manufacturers of Quinine Products since 1822.** Merck is headquarters for fine quinine products, the result of chemical skill and long experience.

ivities of Merck & Co. Inc., in scientific research, modern production, and laboratory control of quality. ★



Main entrance to Merck Research Laboratories • *A step in the production of Merck Ephedrine* • *Sublimation of Iodine* • *Some of the equipment used in the manufacture of Vitamin B_1*

New York • Philadelphia • St. Louis • *In Canada:* MERCK & CO. Ltd., Montreal and Toronto

ST. JOE

LEAD-FREE GREEN LABEL

ZINC OXIDES

for PAINT, ENAMEL, LACQUER, VARNISH

ST. JOE Lead-Free ZINC OXIDES have been adopted by leading manufacturers in the paint and allied industries for this reason: The precise characteristics which consumers' requirements indicate as being most desirable for their respective products, can be readily imparted to our various Green Label grades. This is due to the flexibility of our patented Electro-Thermic Process, by means of which our zinc oxides are produced.

ST. JOSEPH LEAD COMPANY

250 PARK AVENUE • NEW YORK CITY

Plant and Laboratory, Josephtown, Beaver County, Pa.

MADE BY THE LARGEST PRODUCER OF LEAD IN THE UNITED STATES

Federation of Paint and Varnish Production Clubs

Twentieth Annual Convention: Chicago, October 27 and 28, 1941

There was a new high record attendance—more than 1,000—at the twentieth annual meeting of the Federation of Paint and Varnish Production Clubs, October 27 and 28, in Chicago. And the conferring paint technicians were busier than ever and more attentive to the presentations and discussions which constituted the convention program.

There was a particular interest, quite logically, in the matter of working materials, and the exhibits in the

Robert E. Prince
F.P.V.P.C. President—1940-41

paint show were always crowded. Apparently the exhibitors had anticipated this condition, because almost all of them had extra crews on their information lines—and these, quite naturally, were called on for a lot of explaining of how and when desired materials could be got.

The technical papers of this year's meeting were less numerous but of still better quality. That part of the program was ably handled by Joseph J. Mattiello, a veteran from last year, with snap and precision. Although there were fewer papers than usual, the discussions were kept concise because of the extensive consideration which the paint industry's participation in the defense program made necessary. Excellent additions to the scientific lore of the industry were provided also by the papers presented under the federation's scholarships. Further expansion of this feature is planned.

The federation amended its by-laws so as to require formal approval by the executive committee of the applications of local groups seeking recognition as production clubs.

A proposal to change the name of the organization was turned down.

A proposed amendment to the by-laws was filed for 1942 action. This would limit candidates for president, vice-president, treasurer, and general members of the executive committtee to active members.

President's Address

An informative summary of the year's work, with particular reference to its relations to the program of national defense, was presented by President R. E. Prince in his annual address for that office. Mr. Prince said:—

In presenting to this twentieth annual convention of the Federation of Paint and Varnish Production Clubs a report covering the activities of the federation for the year past, I am convinced that in the interest of time and length of our program you and I will benefit more if I am as brief as possible.

That it is a rare distinction for any man to have the honor you bestowed upon me last year to serve as your president goes without saying, and I am deeply appreciative for the privilege of serving this organization and for the fine cooperation I have received from all federation committees and all affiliated clubs.

At the beginning of my term in office it was quite evident that the paint industry was facing an unprecedented year and that we as representatives of that part of the industry who are responsible in a sense for the technical development and production of paint, varnish, and sundry products, would be confronted with ever-changing conditions that would tax to the utmost our skill and energy. That we have and are succeeding in withstanding these hardships is evident by the fine representation here today.

Cooperation in Defense Work

The federation this year supported all departments of our national defense organizations, and we are ready to continue this support whenever the demand is made upon us. Whether you realize it or not a great deal of energy has been put into our defense program and I must tell you that our technical advisory committee shouldered this responsibility almost immediately at the conclusion of our convention in Washington last year and with fine cooperation from the majority of our affiliated clubs have accounted for the solution of problems of serious interest to our army and our national defense program. To John Moore and his committee, to Joseph Mattiello, to the many affiliated club committees, we owe a debt of gratitude and appreciation. You and I will see and hear the results of this intensive work on Tuesday afternoon, and I am sure we will be proud, especially you of the various clubs who gave so much time and thought to the needs of our great army.

To our technical program committee and Joe Mattiello, we are again grateful for the fine cooperative spirit that is always evident in federation affairs. In a year when every individual has been faced with extreme production problems, inventory scarcities, and priority troubles, they still found the time to continue research for the betterment of the industry. Our appreciation to this group is manifold.

The Paint Industries Show this year is probably the most colorful of all times, and under the leadership of Walter Kuster and our loyal friends and affiliates, the raw material producers, we can be grateful for a very successful convention.

Upon entering the convention proper you are amazed at the grand spectacle that meets your eyes. Long rows of colorful displays showing new processes, equipment, raw materials, and containers, and trained technicians to explain their uses, or as someone said—"To console you but promise nothing."

We usually take for granted our host committee, but little do you realize the advanced planning necessary to set up an efficient registration plan and the hours this committee serve to tend and supervise the activities during a convention period. This year we have been blessed with an experienced chairman, Jim Creager, who has done a good job again and his committee has been most loyal. In addition to the many details of registration, the host committee in conjunction with the entertainment committee have advanced a new and much wanted program to take care of the ladies.

This sidelight of the host and entertainment committees is by no means the master stroke of the entertainment committee. The committee who will make possible your entertainment during the annual banquet have with untiring effort personally selected the features you will see. This was no last-minute effort nor was it left to any outsider. Capable Emory Schneider and his committee have given us the show of shows. Your president is extremely grateful to the host and entertainment committees.

Death of Secretary Heckel

With the passing of Uncle George Heckel early in my term of office, the federation was faced with the loss of our esteemed secretary, and, in accordance with our by-laws, the executive committee, meeting in Cleveland March 1, appointed V. C. Bidlack to serve as secretary for the balance of the year, or until such time as a new secretary could be nominated and elected at a general convention assembly. Mr. Bidlack accepted this assignment on the conditions as stated above. Mr. George Heckel, jr., was retained as assistant to the secretary at a stated salary, and he has successfully continued out the year supervising the *Digest*—publication, sale, and other details thereof. To Vic Bidlack and George, jr., we should be warmly grateful for this fine cooperation.

Your president is grateful to the faithful guardians of our federation fiscal affairs. You will remember that last year our ever-faithful and long-experienced treasurer, Clarence Clark, asked that an assistant treasurer be appointed to serve with him. Your vote made this possible and Paul Blackmore has served faithfully with Mr. Clark through the year. As to Treasurer Clark, we could heap orchids on him from head to toe and by no means could we show him the respect due him for the years of tireless effort and capable direction he has given this organization. My deep appreciation for having had the opportunity to know and to work with him.

Uniformity in Membership

Two years ago in Chicago the advisory committee recommended that the executive committee study the membership eligibility problem and this problem was continued on the agenda at Washington last year. Many annoyances were eliminated during the 1939-40 period, but it was left for this year's membership committee to draft and put into effect a uniform application for membership. During the first six months of this year the chairman of the membership committee, past president Vernon Ladd, with the help of his committee and the cooperation of twelve clubs, has had printed and distributed to all clubs, uniform application blanks, and I understand they have proved of great value from the standpoint of educating the local clubs as to the eligibility of applicants and as a means of nationally policing the general membership. My appreciation to Mr. Ladd and his committee for a quick and efficient handling of this problem.

Employment Relations

In President Trigg's address to our convention last year he proposed that the federation make a study of employment relationships and that a committee be formed to coordinate this study and present it to the executive committees of the NPV&LA. Your president concurring with President Trigg's wish, appointed this committee. It is with profound regret that this committee was unable to receive the necessary cooperation from a solicited number of representative firms to make a report possible. I am sure that in President Trigg's request he, with his usual foresight, saw a growing need for the paint industry to once and for all clarify the job relationship of employees and be ready when the need for this emergency arises. I recommend that this work be continued to a successful conclusion.

Also, in accordance with the wish of the advisory committee at the Washington meeting last year, a committee was appointed to replace the then known membership coordinating committee. This new committee was headed by Ralph Everett, and is known as the coordinating committee and was expected to serve as a clearing house, so to speak, on matters of joint interest between the federation and the NPV&LA.

The question of entertainment in rooms was turned over to this committee, and inasmuch as a number of clubs had gone on record as approving or recommending curtailment of entertainment in rooms during the hours of our program, it was left to this committee to draft a letter to all visiting class B members of the national association asking their cooperation in the curtailment of entertainment. This letter, under your president's signature, was posted two weeks prior to this assembly.

Photo Standards Published

At the Cleveland meeting of the advisory committee a report was made by the committee named to handle the matter of publishing the Philadelphia club's photo standards. At that time an appropriation was made by the executive committee to underwrite the publication of a number of these sets, and since then the committee has completed their work and turned over to our secretary's office, bound copies which are now for sale. They are displayed at this convention and have appropriate order blanks. To this committee and their efficient chairman, G. H. Wescott, your

F.P.V.P.C. 1941-42 Official Family

President, John F. McMenamin, of Felton, Sibley & Co., Philadelphia.

Vice-president, Walter F. Kuster, of the Carpenter-Morton Company, Everett, Mass.

Treasurer, Paul O. Blackmore, of the Ault & Wiborg Corporation, Cincinnati.

Secretary, George B. Heckel, jr., 1524 Chestnut street, Philadelphia.

Other members of executive committee, Dr. Joseph J. Mattiello, of the Hilo Varnish Corporation, Brooklyn, N. Y.; Eugene E. Sparrow, of the Imperial Varnish & Color Company, Toronto, Ont.; H. E. Hancock, of the Sewall Paint & Varnish Company, Kansas City, Mo.; A. T. Montayne, of Pratt & Lambert, Inc., Buffalo, N. Y.

The New F.P.V.P.C. President

John Francis McMenamin, elected president of the Federation of Paint and Varnish Production Clubs at its 1941 annual meeting, is plant superintendent for Felton, Sibley & Co., manufacturer of paints, varnishes, and lacquers, Philadelphia. He is a Philadelphian by birth, long residence, and entire business career.

Mr. McMenamin was born July 24, 1897. His father's name was Thomas; his mother's, Margaret (nee Breen). The boy went to school at the St. Joseph's preparatory institution and then attended St. Joseph's College and Temple University, specializing in chemistry in the last-named institution. He left college in his junior year to join the United States Navy in May, 1917. He served in the navy, with the rank of ensign and later that of lieutenant, junior grade, until June, 1921.

October 15, 1921, Mr. McMenamin entered the employ of Felton, Sibley & Co. as a chemist. He eventually became chief chemist and served in that capacity until March, 1934, when he was made superintendent. His activities in production club affairs cover a number of years. He has been secretary, vice-president, and president of the Philadelphia Paint and Varnish Production Club; he has been chairman of the program, plant managers, and paint show (twice) committees of the national federation, a member of its executive committee and was its vice-president during the past year.

Mr. McMenamin is a member of the Roman Catholic Church and a fourth degree Knight of Columbus. He lives now at 7441 Overhill road, Melrose Park, with Mrs. McMenamin, who was Margaret O'Brien—they were married September 21, 1927—and their daughter, Margaret, who is four years old. Mr. McMenamin gets his exercise in bowling and his relaxation in fishing.

J. F. McMenamin

president is grateful for a fine job well accomplished.

This afternoon's open forum will bring to you a much thought-out question and answer program prepared by the plant managers' committee and under the capable leadership of your vice-president, John McMenamin. This program is and will be the highlight of our convention. The problems of today and tomorrow will be discussed. Not one of us must think of missing this program.

Name Not Changed

The by-laws committee presented the question of changing the name of our group from Federation of Paint and Varnish Production Clubs to something more dignified. This matter has been debated pro and con and at the final suggestion of the by-laws committee chairman, George Sutherland, it was decided that for the present no name could be found that would be any more appropriate.

Among the Clubs

Throughout the year your president has contacted the following clubs:—St. Louis, CDIC, Northwest, Chicago at Milwaukee, and at home; Southern States Associates, Cleveland; a summer session of the New York club, Montreal and Toronto. While reporting the activities of the federation, naturally the

George B. Heckel, Jr.
Succeeds his deceased father as F.P.V.P.C. Secretary

one important subject, "our part in national defense," became the keynote of my remarks. It was a fine experience in meeting with the clubs and attending their meetings. I enjoyed and appreciated the warm welcome accorded me. Especially was my trip to the Canadian clubs of interest. I felt that for once we had a message for them and I feel that it will bear fruit.

During the early Spring it became evident that no vacation should be taken by any club to the detriment of their cooperative work with the army engineers, and I asked that all clubs continue their work on the camouflage study in order to speed up the work that was under way. I am very appreciative of the cooperation of the various clubs in this matter, especially to the New York, Chicago, and Philadelphia clubs.

To my predecessor, Bob Smith, I am deeply indebted for his demonstration of fine leadership in 1940, and in closing this year's work, I hope we have lived up to the standard he set and hoped would be continued when he said:—

"To those who carry the responsibility for guiding the policies of our several clubs, I wish to leave this thought—never forget that we have built this federation upon the basis of intensive individual effort. We must never relax our vigilance in that direction." So I say—carry on in 1942!"

Officers' Reports

Treasurer C. W. Clark reported that the October balance of the general fund was $14,839.49 and that of the educational fund, $28,619.38. He pointed out that the net result after final readjustment of paint show finances would be a material reduction in the general fund and some increase in the educational fund.

The report of the secretary's office was presented by G. B. Heckel, jr., assistant to Secretary V. C. Bidlack. This showed that the organization had had a net gain of twenty-two in membership during the year and had 1,471 club members, 56 associate members, and 199 subscribing members—a total of 1,726.

The report also told of the work of publishing the *Official Digest*, the yearbook, and the technical proceedings, and noted the interim meeting of the advisory committee.

The memorials committee reported the deaths of George B. Heckel, secretary of the federation; of Ernest Eckhart, Leonard Engle, Herbert Osias, O. H. Robertson, and H. L. Williams.

For the paint show committee, W. F. Kuster, chairman, related the genesis of that institution which was inaugurated ten years ago with eighteen exhibitors. Of the forty-seven exhibitors in this year's show, the following seven had been participants in all the ten annual exhibitions:—

American Gum Importers Association, Brooklyn, N. Y.
Anderson-Prichard Oil Company, Oklahoma City, Okla.
Bakelite Corporation, New York.
Binney & Smith Company, New York.
Resinous Products & Chemical Company, Philadelphia.
Strook & Wittenberg Corporation, New York.
Wilson & Bennett Manufacturing Company, Chicago.

Technical Cooperation

The value, the necessity, and the actual achievement of coordinated technical endeavors for the advancement of the paint industry were stressed by President Prince in his introduction of the scientific aspects of the program. He said:—

Another year has passed and we are again meeting. The energy expended in 1941 will soon be history. A hundred years hence, when the history of the paint industry is written, the people of that day will no doubt marvel that so much progress in invention, science, and production could be made in so brief a period. Historians will probably point out that it was no doubt due to the foresight of a group of technical and semitechnical men, who combined their knowledge and activities under a single effort and with the fearless conviction that "Knowledge is power" brought about a change in the paint industry which led to a scientific attack on what for generations has been most unscientific.

We of today are that group. We are one score years of age. We can look back and realize that what has happened in our time, if multiplied by five, will or should startle our coming generations.

I wonder when they look through the records if they will realize the seriousness of the situation that faced the world in the 1940's—a prewar or national defense hysteria that can by its overwhelming weight, break down the economics of an industry in so short a time? I wonder if sustained business of their time will have become so regulated as to take care of any emergency inflation such as we now face?

Today we are here seeking knowledge that will enable us to progress our industry and build a stronger defense against these natural laws, and if I am to assume that you feel as I do, you have come here to fight for your industry's very existence. Today, if not a year ago, you realize more and more that you are your brother's keeper, and that no part or parcel of our industry can be allowed to break down.

Federations, associations, or whatever you care to call them, are today more and more a necessity. Individual initiative has never built the power or the strength to overcome great deficiencies. Picture, if you will, a country that allowed individual development or one of our own single organizations attempting to cover the research for the entire paint industry. Would we have progressed as far as we have? We cannot, however, have efficiency in coordinated endeavors unless there is an individual effort. Those of you who have had experience in participation in a program such as you will see and hear this year, have not lost by the experience. You who will carry on have much to gain. To the young men anxious to make your mark in the industry, you have a chance for as chosen a profession today as could be desired. No better opportunity can be found that will help your advancement than your activities in the work now being carried on by your federation. May I also say that with this opportunity before you, you can become a prominent personage and a leader in your particular field.

To these men of the federation of production clubs who have contributed to the advanced thinking for our industry, I salute you. You have unselfishly devoted your time and thought for an industry's good. You are to be complimented for this achievement. To the leader of this program, Dr. Joseph Mattiello, we are greatly appreciative for the fine work he has done, and it is with a feeling of great satisfaction that I am privileged to open this twentieth convention of the Federation of Paint and Varnish Production Clubs by introducing to you and turning the meeting over to your program chairman, a leader of your scientific section, your friend and mine, Doctor, or let's say, Joe Mattiello.

Technical Papers

The report of the technical program committee, of which Dr. Joseph J. Mattiello was chairman, took the form, as usual, of presentation and discussion of papers prepared by affiliated local clubs. These contributions are summarized below.

The committees of awards selected from the technical papers the following for the several prizes offered in that respect:—

American Paint Journal awards for meritorius papers:—First prize, Cincinnati - Dayton - Indianapolis - Columbus club's paper, "Some Factors Affecting Drier Activity"; second prize, Chicago club's paper, "Some Aspects in the Bodying of Oils"; third prize, New York club's paper, "Color Strength and Texture Development in Roller Mill Grinding."

The Paint Industry Magazine awards for meritorious presentation of papers:—First prize, Robert D. Bonney, of the New York club; second prize, G. R. Henry, of the Philadelphia club; honorable mention, Francis Scofield, of the Baltimore club.

The prize of the *National Paint Bulletin* for the local club secretary best reporting the meetings of the year was awarded to N. T. Phelps, of the Philadelphia club.

The Toronto club's golf trophy was awarded to the Detroit club.

Factors Affecting Drier Activity

Cincinnati, Dayton, Indianapolis, and Columbus Club

It was postulated that the drying of a paint is affected by (1) atmospheric conditions (temperature, relative humidity, composition, and rate of circulation) and light, (2) concentration and composition of the drier, (3) the pigment, (4) substances, such as resins, dissolved in the oil, (5) the oil, (6) solvents, and (7) film thickness. The work reported was directed to the effects on the drying of linseed oil of the concentration and composition of naphthenate driers and especially to the effect of the pigment, titanium dioxide, chinese blue, and lead, cobalt, and manganese naphthenates being studied.

Comprehensive data were presented on twenty-nine materials having little or no action on cobalt naphthenate in respect of adsorption by the pigment; on fifteen materials under many conditions which affected drier adsorption; on sixteen which effect drier precipitation by acidity, seven by alkalinity, and twenty by base exchange; on seventy-two materials effecting color changes; on twenty-one materials which apparently introduced an influencing factor of moisture; on miscellaneous effects of five reagents; and on the prevention of drier adsorption by a list of 101 reagents.

When loss of drying is attributable to effects of the pigment, the following preventive methods were suggested:—

Addition of excess drier.

Formation of a protective coating around the pigment particles—(1) an insoluble layer of organic material, (2) an insoluble layer of inorganic material, (3) a layer of adsorbed material (a) soluble in the vehicle, (b) insoluble in the vehicle but soluble in other media.

Substitution of another drier which does not undergo the change experienced with the drier in question.

These several methods were discussed, in part with the data previously noted. The conclusive interpretation of the wealth of data was stated as follows:—

Methods by which a material can cause loss of drying by action on the drier are (a) precipitation of the drier by (1) acidity, (2) alkalinity, (3) base exchange; (b) adsorption of the drier.

The formation of a nonmolecular layer of the drier on the pigment is one of the stages in the adsorption of driers by titanium dioxide.

A method for determining the specific surface of titanium dioxide by drier adsorption has been developed.

The amounts of cobalt, lead, and manganese naphthenates which titanium dioxide will absorb, calculated on the amount of metal adsorbed, are roughly in proportion to the atomic weights of the metals.

Several materials have been found which are effective in reducing adsorption of cobalt naphthenate by titanium dioxide. In short-period tests these materials are effective in preventing loss of drying in titanium dioxide linseed oil paints.

The action of chinese blue in causing loss of drying is a combination of drier adsorption and base exchange.

Bodying of Oils

Chicago Club

A further study was made of the bodying under manufacturing conditions, alone and in 50-50 blends, of dehydrated castor oil, varnish-makers' linseed oil, liquefied oiticica oil, "Thermoil A," and quick-bodying oiticica oil FS, in 25-gallon varnishes with ester gum. Each oil, where necessary, was preliminarily bodied to Z-3 viscosity. The bases were made by (1) bodying each oil separately at various temperatures, (2)

Paul O. Blackmore
New F.P.V.P.C. Treasurer

blending two oils before bodying, (3) blending 50-50 and holding two hours at 400° F. before reaching top heat. The varnishes made from each oil base had 50 percent of nonvolatile matter and contained cobalt naphthenate and lead naphthenate.

For the oils, data were determined for final viscosity, color before and after bodying, and viscosity, acid member, and color in 60-percent solution in oleum spirits. Data were observed for the varnishes on viscosity, color, acid member, nonvolatile, drying on glass, resistance after forty-eight hours to cold water and to boiling water, flexibility after baking, and gloss by eye.

The findings were stated as follows:—

From the data determined we can see that there are advantages in mixing the oils before bodying and addition to resin. If slow-bodying oils are used, the holding time is very long and the loss high, as compared with a mixture of these oils with faster-bodying oils. This difference in time was greater than the average of the two oils boiled separately.

The varnishes made by blending the 100-percent oils before cooking further with ester gum gave the same characteristics as the varnishes made from the 50-50 blend of oils.

Holding the mixed oils at 400° F. for two hours and then running to top heat showed no advantage over varnishes run to top heat directly. If some catalyst had been present, this result might have been different. We also realize that, if we should have run the resin and the quick-bodying oils, such as both types of oiticica oil and "Thermoil A," at 450° F. and then caught with bodied oils, such as linseed or dehydrated castor oil, we might have had still different results.

It is interesting to note that cold blending of varnishes gave a different result than cooking the oils together. The drying seemed to be almost as good as the faster-drying oil, but in several cases there was a decided dulling on drying. The water resistance in most cases was also better on the cold mixture of these varnishes.

These results were obtained with 25-gallon ester gum varnishes. What the results would be with different oil lengths or different resins would be hard to judge. Also changing the proportions

CICOIL

Laboratory-Controlled, Uniform Quality, Raw Liquid Oiticica Oil

●

Produced by

BRASIL OITICICA S. A.
RIO DE JANEIRO, BRAZIL

Pioneers and Largest Producers of Oiticica Oil

●

Sold under Guaranteed Specifications

TANK CARS • TANK WAGONS • DRUMS

Spot BRASIL OITICICA S.A. E.U.B. *Futures*

BRAZIL OITICICA, INC.
80 BROAD STREET NEW YORK CITY
Telephone: DIgby 4-9091 Cable Address: CICOIL

of oils or running at other temperatures would give us still other changes.

Roller Mill Grinding Data

New York Club

Data were presented on the development of color strength and texture by roller mill grinding and on loss of volatile vehicle in operation. It was felt that maximum color strength development, rather than emphasis on texture, would result in conservation of materials and sometimes in reduced costs, these results being regarded as desirable under the exigencies of national defense economy.

Five factories and four laboratories collaborated in the experimentation from which the data were derived. These data summed up as follows:—

While in many cases texture develops more rapidly than strength, this is not true with all pigments or at all mill settings. It is not safe to assume that the ultimate strength of a pigment is being obtained when the grind shows satisfactory texture.

Very loosely set mills, in general, develop texture upon repeated grinding, but do not develop much strength beyond that developed in one pass over the mill. The indication is that some positive pressure is necessary for strength development.

Five-roller, tightly set mills in most cases develop texture considerably more rapidly than strength.

Apparently the larger aggregates which account for poor texture are, in general, broken down to give good texture before the smaller aggregates which must be broken down for maximum strength.

The results indicate that laboratory, tightly set mills develop strength and texture more rapidly than factory three-roller mills, but less rapidly than factory five-roller mills. However, the factory three-roller mills in this study were set for relatively high production rates.

Mill pastes made with vehicles containing appreciable amounts of volatile solvents showed significant evaporation losses during grinding.

There is an indication that in some cases factory grinding has been more than is necessary for satisfactory texture and strength, and that in other cases factory grinds have fallen considerably short of developing full strength, even though the desired texture was obtained.

These results suggest that strength and texture development studies should be made in the individual factories with the various pigment-vehicle combinations and the various types of mills used. A study should be made to determine if more strength cannot be economically developed. Obviously, with the more expensive pigments, it is more economical to do more grinding to get maximum streingth than with the less expensive pigments.

A further study should be made of mill settings, production rates, and mill base formulations, particularly viscosity of vehicles and consistency of grinding pastes. Each plant should establish standard production rates for each formula and type of mill.

A further study should be made of loss of volatile during grinding. High volatile content of the grinding vehicle usually results in low yield, in confusing actual strength development determinations, and in complicating later formulations. The loss of volatile is quite appreciable in both laboratory and factory grinds. While the intrinsic value of the volatile may not be great, the loss results in variation from grind to grind in actual pigment and vehicle solids content, so that subsequent compounding may result in variations in final product composition from one batch to another. Obviously, if the volatile loss cannot be minimized and standardized in any given mill operation, it should be determined and compensated for in evaluating efficiency of mill operation and in subsequent manufacturing processes.

The high production rate and efficient grinding obtained with stiff pastes containing a high-viscosity vehicle indicate that real economies may result from a further study directed toward selecting better-type vehicles, increasing vehicle viscosity, decreasing volatile content, and increasing paste consistency.

General conclusions from the experimental results were stated as follows:—

A detailed review of the tables may disclose facts not included in the discussion. The type of vehicle, the types of pigment, the vehicle viscosity, the grinding paste consistency, and the production rate are all important factors in both strength and texture development. It is difficult to generalize on the effect of any of these factors without taking them all into consideration.

Laboratory mills set at a clearance of 0.0015 inch developed texture without much strength development after the first pass over the mills. Plant mills, on the other hand, set for high production rates, indicating a relatively loose mill setting, developed strength in some cases more rapidly than texture. Variations in laboratory mill settings resulted in more strength development with the same pigment ,in some cases, and more rapid texture development in other cases. It

Dr. Joseph J. Mattiello

Handled This Year's Technical Program—Was Elected to Executive Committee.

seems that the exact mill setting is important.

Tight mill settings with most pigments, particularly with the five-roller high-speed mills, seem to break down the larger aggregates which cause poor texture more rapidly than the smaller aggregates which are responsible for incomplete strength development.

The grinding characteristics of pigments, even of pigments having the same composition, vary considerably. No attempt has been made to evaluate the grinding characteristics of different pigments.

It has not been possible in this investigation to give any consideration to many of the factors influencing grinding, such as, for example, roller speed ratios, mill temperature, and general condition of the mill. The diameter of the rollers, which determines the effective roller contact, may be an important factor. Certainly a further study is indicated.

A further study should be made of the effect of paste consistency on grinding. This study should include quantitatively measured data.

The tables given include some data on mixing but not sufficient for an analysis. Degree of mixing and time of ageing pastes before grinding undoubtedly are important factors.

No study has been made of the effect of tailings. The coarse tailings which collect at the end of a grind are not so well ground as the bulk of the batch and should be segregated and put with the next batch, or reground separately.

The investigation has not included other types of mills. These should be included in a further study.

No hiding power determinations have been made. In many products hiding power is more important than strength. A further study should include a correlation of hiding power and texture development and probably a correlation of the development of texture, hiding power, and strength.

It does seem clearly indicated that, after the proper pigment, based upon laboratory tests, has been selected, grinding studies should be made in the factory in order to obtain the maximum value of the pigment. Each factory should establish standard grinding conditions for each formula and each type of mill.

Loss of Drying Time

Montreal Club

In spite of exigencies of the times further progress was made during the past year in the study of the problem of overcoming loss of drying time which has been under way for several years. It was expected that another year would bring a complete report.

Lead oxide and strontium oxide appeared best of the oxides studied in retarding loss of drying time; addition of strontium oxide appeared also to aid suspension. Calcium naphthenate had been found best of that group as drier aid and suspension agent; calcium naphthenate was more recently found of promise; and lithium naphthenate now appeared to be superior.

The speed of drying time was found to be affected by grinding methods, pebble mill grinding giving the best time, followed by roller mill and then buhrstone mill. Work is being done with oils of various acid values. Coated pigments are to be studied. Comparisons of drier adsorptions may be undertaken.

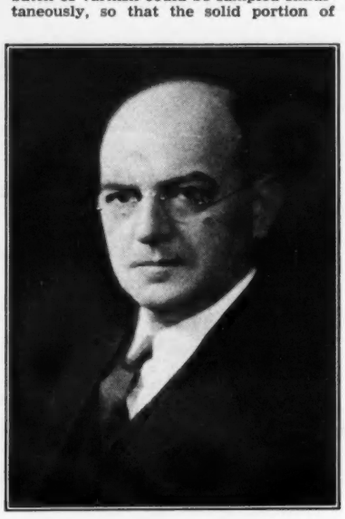
Thinning of Varnish With Mineral Spirits

Philadelphia Club

Three years of work on mineral solvents in varnish-making has shown that satisfaction is practicable in the following requirements:—

(1) That the varnish could be thinned hot (400° to 500° F.) without loss of solvent (actual loss approximately 0.5 percent).

(2) That several portions of the same batch of varnish could be sampled simultaneously, so that the solid portion of each thinned varnish would be the same.



C. W. Clark

Ten-Year Veteran Treasurer—Now Treasurer Emeritus

(3) That several portions of varnish could be simultaneously thinned with different thinners to produce varnishes of the desired concentration (variation reduced to ±0.1 percent).

The work reported this year was in the preparing of thinned varnishes of uniform concentration and the properties resulting from the thinning. Ratios of viscosity at equal concentration and concentration at equal viscosity, which are quite constant and characteristic of the solvents, were calculated for ester gum and "Amberol F-7" data. The consistency of these ratios was considered to form a promising basis for establishing a standard method of comparing solvents, and is in line with work now under consideration by a subcommittee of the American Society for Testing Materials.

Paraffinic, naphthenic, aromatic, and intermediate spirits having approximately the same distillation characteristics were compared in quantitative, simultaneous, hot thinnings of varnish. The results were interpreted to show that the commonly accepted tests for evaluating mineral spirits were somewhat misleading in that they underrate paraffinic spirits and overrate those of the naphthenic or aromatic type.

This commentary was made:—

The precipitation which occurred with a 10-gallon varnish made with "Amberol 801" when thinned with paraffinic spirits confirms the well-known fact that paraffinic spirits will cause precipitation of certain types of varnishes. Our present information on paraffinic spirits indicates that these are highly satisfactory for thinning ester gum and certain other types of varnishes, but entirely unsuitable for other types.

In using any paraffinic type of spirits its mitability for the particular varnish with which it is to be used must be carefully considered. Actual hot thinning of a particular varnish base is the only certain way of determining the suitability of the solvent for thinning this type of base.

Drift in Color Standards

New York Club

Continuing thirteen years of study of the stability of color standards, spectrophotometric evaluations were made on wet films of a series of nine chromatic pigments (lamp black, rubin lake, iron oxide red, burnt umber, ferrite yellow, chrome yellow, chrome green, "monastral" blue, prussian blue) dispersed in each of three vehicles (raw linseed oil, mineral oil, ethyleneglycol) and separately extended with four white bases (lithopone, titanium dioxide, white lead, zinc oxide), and on films of lithopone, titanium dioxide, and zinc oxide in each of the three vehicles. Curves were made also after four and eight months for the titanium dioxide, white lead, and zinc oxide extensions of the several pigments, and after four and twelve months for the lithopone extensions.

These conclusions were stated:—

Indications are that the changes occurring in the tinted paints following an initial period of one to two months after manufacture are small; in fact, so small as to consider their having good can stability. It is intended to continue the measurements after further ageing. It is indicated that supplementary measurements also should be made of the changes which occurred during the first one or two months after manufacture.

Measurements were also made on mixtures of lithopone, titanium dioxide, and zinc oxide dispersed separately with raw linseed oil, mineral oil, and ethyleneglycol. In general, all the white bases increased in reflectance with age. This is attributed to some dispersion phenomenon.

A significant color change occurred in the white bases dispersed in raw linseed oil, due to the "bleaching" of the oil. This would indicate that this vehicle would be unsuitable for maintaining color standards of white bases or light tints. In stronger tints the effect would still be noticeable, but to a lesser degree because of the higher concentration of the tinting pigment. This tendency also was noticed in the measurements on the tinted paints, but a sufficient time period had not elapsed for the change to be definitely classed as significant.

Hiding Power of Flat Wall Paints

Baltimore Club

Reported departures of tinted flat wall paints from the ratios of reflectance and hiding power stated in Federal specification TT-P-51a were studied with paints with a base of titanium calcium pigment which had a reflectance of 90.2 percent and a hiding power of 252 square-feet per gallon. The wet hiding power was determined in accordance with paragraph F-2g of the specification, the work of two observers being averaged.

These tests were made with paints tinted with lampblack, ultramarine, ferrite yellow, chrome yellow, chrome orange, para red, blue dye, red dye, yellow dye, and an ultramarine-chrome orange gray. White enamel, plain and tinted with chrome yellow, also was tested. Characteristics of the several tinting agents and differences of titanium dioxide and lithopone bases were discussed, and the following conclusions were stated:—

The table given in Federal specification TT-P-51a is adequate to predict the hiding power of tinted paints as long as their absorption is not strongly selective, but fails for very selective colors, such as red, orange, and yellow. This indicates that the scattering power of these paints is significantly changed by the tinting process.

If it is desired that the various tints be produced from the same white base, some other method of specification of hiding power must be devised.

If, on the other hand, the table represents the desired properties, then manufacturers making red or yellow tints must use a white base of higher hiding power than is required by the specification.

Climatic Effects on Paints and Enamels

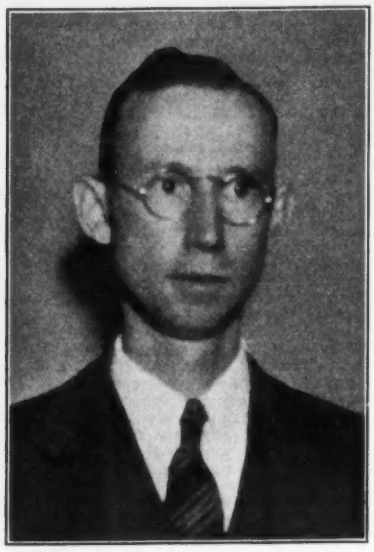
Pittsburgh Club

Data were presented on the results of exposure tests at Los Angeles, Cal.; Hialeah, Fla.; Pittsburgh, Pa.; Chi-

cago, Ill.; Fargo, N. D.; Tucson, Ariz.; Chelsea, Mass.; New Kensington, Pa., and Mobile, Ala. The coatings tested were linseed oil paints of lead, zinc, and titanium, of lithopone and zinc oxide, and of lithopone, zinc oxide and carbon black; a phenolic tung-linseed enamel with zinc and titanium and lampblack; a medium-length alkyd enamel with the same pigments; and a 30-gallon tung-linseed ester gum enamel, also containing zinc, titanium, and lampblack. The coatings were examined after seven months' exposure.

The findings were stated as follows:—

From initial observations the exposure results indicate that the house paints are



Walter F. Kuster
Chairman, 1941 Paint Show—Elected Vice-President

reacting to climatic conditions fairly close to results obtained from other tests of this nature.

The Florida exposures in general are showing fairly quick breakdown, such as considerable chalking, cracking, and checking; while in nearly all other locations the breakdown from chalking and cracking and checking is slight.

It is interesting to note that Los Angeles shows practically no signs of the above-mentioned types of failures; and Tucson shows signs in only on (linseed oil paint containing lithopone, leaded zinc oxide, zinc oxide, and lampblack).

In the case of the enamels it is noted that the alkyd in nearly all cases is showing practically no failure other than change of color. The phenolic and oleoresinous types are pretty much on a par, showing loss of gloss and chalking in nearly all locations. Also, in the case of the phenolic, cracking and checking were extreme in Tucson, but no signs of these conditions showed in Florida. In the same respect, the oleoresinous type showed considerable checking and cracking in Florida and extreme in Tucson.

Further reports will be given when deemed necessary, and it is the intention of the Pittsburgh club to recall all panels at a date as yet undecided, at which time the local committee will evaluate the paints and enamels for a final report.

Adhesion Measurement Of Coatings

New York Club

Further work was done on the testing of adhesion of coatings by the "direct tensile" method reported last year, that is, coating a metal specimen, permitting the coating today, cementing a definite area of surface of the coating to wood, applying tension to opposite ends of the cemented specimen, and recording the breaking load.

The continued work comprised tests of specification primers of the following types:—(1) Alkyd-red lead, (2) linseed oil-red lead, (3) phenolic varnish-red lead, (4) iron oxide-zinc chromate-phenolic, (5) blue lead-phenolic, (6) blue lead-linseed oil, (7) aluminum-zinc chromate-phenolic, (8) zinc chromate-phenolic, (9) iron oxide-linseed oil, (10) rapid drying spray primers, such as naval aircraft primer P-27b.

The findings were stated as follows:—

Each group of primers has a definite zone of adhesion, which appears to be dependent on both the vehicle composition and the pigmentation. To obtain the direct effects of pigmentation it would be necessary to compare various pigments in the same vehicle. No such comparison has been made in these tests. The highest zone of adhesion with the materials tested was obtained with the phenolic resin varnishes, using aluminum-zinc chromate and iron oxide-zinc chromate pigments.

Adhesion is not directly related to the flexibility of the coating. Primer 4-A, based on aluminum and zinc chromate, for example, had good flexibility and adhesion, but showed no marked advantage in panel condition when compared with primer 2-A (iron oxide-zinc chromate) which had poor flexibility with high adhesion.

In general, all primers arrived at the maximum adhesion or equilibrium in a period of six months or less. Primer 4-B (iron oxide-zinc chromate over aluminum-zinc chromate), however, still showed an upward trend at the end of thirteen months' exposure.

In this series of tests, only primer 6-A (linseed oil-iron oxide) showed complete failure, which was forecast by a rapid decline in adhesion prior to any visual indication of failure. However, the fact that all the other panels, with the one exception (4-B) showed a downward trend in adhesion indicates that they were on the way to ultimate failure, even though their appearance gave no such indication.

It should be remembered that all these coatings were on metal panels—not on wood. In the case of coatings on wood flexibility, no doubt, is an important factor in durability. In the case of coatings on metals, adhesion appears to be the factor of most importance.

The results of these tests further confirm the suggestion in last year's paper that a study of loss of adhesion during weathering tests of coatings on metal panels may save much time by giving indication of failure considerably in advance of indications by the usual method of visual observation.

Influences on Drying Time of Oils

Cleveland Club

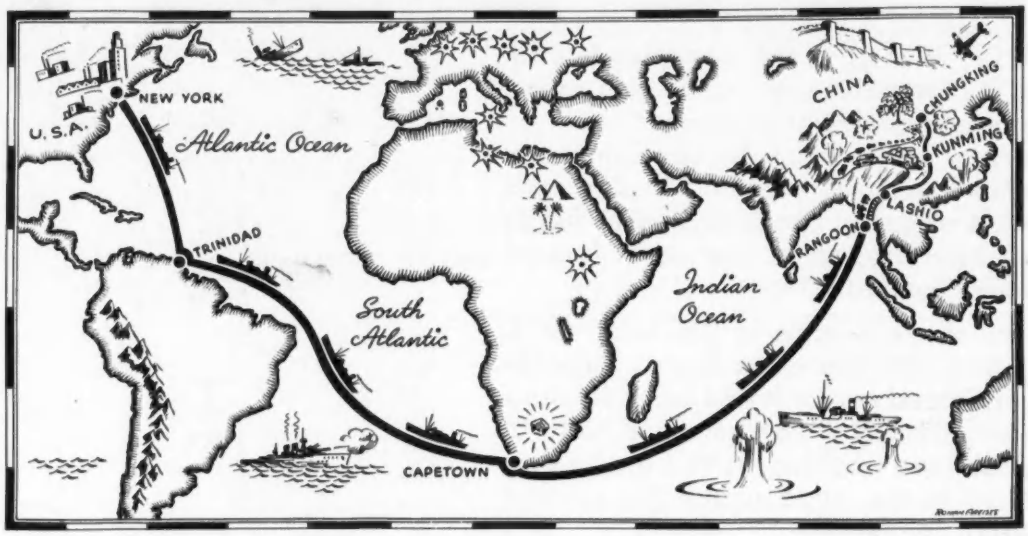
In the study of the effects of temperature and humidity on protective coatings, begun in 1939, it developed that broad experimentation in the coatings field resulted in vague or confusing conclusions because of the number of conditions involved. For this reason the work during the past year was restricted to a simple series of oils and to the measuring of drying time alone.

Eleven oils were taken, each being treated with four combinations of lead, manganese, and cobalt driers. The forty-four samples were tested on plate-glass panels under nine selected conditions. "Drying time" was defined according to the Federal specifications for "dry-to-touch" and "firm" and a modification of the A.S.T.M. definition of "tack-free" for the sake of speed.

Tabulated data on results were presented, and the following general conclusions were presented:—

1. Drying differences due to differences in humidity and temperature are not much affected by changing the drier concentrations, so long as at least the usual minimum quantities of driers are employed.
2. Drying is slower at high humidity and temperature than at intermediate humidity and temperature. This is more apparent with the slower or "softer" oils.
3. Retardation of drying by excess

CHINA MAINTAINS VITAL SUPPLY LINE FOR AMERICAN PAINT INDUSTRY



By truck, rail and sea . . . 14,794 miles !

THROUGH BOMBS AND BLOCKADES UNIVERSAL TRADING CORPORATION SUPPLIED DURING THE PAST YEAR 34,241 TONS OF CHINA WOODOIL

In spite of tremendous transportation difficulties, Universal Trading Corporation, in conjunction with Foo Shing Trading Corporation in China, supplied American Paint and Varnish Manufacturers with 34,241 tons of China Woodoil — a strategic material for Defense— between September 1, 1940 and August 31, 1941.

Despite hazards of war, severe bombings, landslides, and malaria, Universal Trading Corporation pledges continued efforts to bring you China Woodoil to meet your requirements — to cooperate with the American Paint and Varnish Industries in their share of the Defense Program—to promote trade between China and the U. S. A.

YOU CAN ALWAYS DO BUSINESS WITH CHINA !

UNIVERSAL TRADING CORPORATION

CABLE ADDRESS: UNITRACORP
630 FIFTH AVENUE NEW YORK, N. Y.
TELEPHONE CIRCLE 5-7646

drier is more pronounced with heat-bodied than with blown oils.

4. Blown oils are less sensitive to humidity effects than straight heat-bodied oils.

5. Dehydrated castor oil, as well as tung oil, shows only moderate susceptibility to high humidity in comparison to the four types of linseed oil. This conclusion is limited by the forty-hour test period. Longer drying periods with more sensitive tack tests might show different results.

Further work on the general subject is contemplated along several lines, particularly in the following directions, and suggestions are invited:—

1. "Softening back" is a loosely used term which might be studied by drying one of the four sets of oils under optimum conditions for two to seven days, then increasing humidity and following the change in tackiness of each oil under controlled conditions. This would then lead to a study of recoating qualities and finally to exposure evaluation.

2. Attempts to measure the water taken up by the film during high humidity drying in some instances selected from the table, would be of theoretical interest with respect to the mechanism of drying.

Health Hazards in The Paint Industry

Kansas City Club

On this basis of personal observations in actual practice in the paint, varnish, and lacquer industry, health data were compiled on the variety of materials used in the many processes. These were checked with data of governmental and other national agencies, and the more important aspects of typical hazards were presented as follows:—

Inert Metallic Pigments

Manufacturers report that the iron oxide pigments made from natural iron ores and those made from iron salts have never been known to have harmful effects on the workman who has been exposed to iron oxide dust for periods as long as twenty-five or thirty years. X-ray examinations of the lungs of these men show no lung fibrosis, and their general health has been excellent. Iron oxide dusts do not act as a skin irritant, but while experience has shown it to be harmless it is an evident fact that any foreign material breathed into the lungs might cause local irritation. Therefore, all employees who are subject to high dust concentration should wear approved respirators.

Chrome oxide is another pigment that is reported to have the same inert properties as the iron oxides and to have no physiological effects on the worker more than common dust, even though some of the salts of chromium are considered poisonous.

Ultramarine blues are nontoxic in nature, but the workmen should be protected from the dust as it, like other silicious materials, is a mechanical irritant of the respiratory tract.

Barium sulphate is a harmless material as far as toxicity is concerned, because it is insoluble in the human body, being used in making roentgenograms of internal cavities, but all the other common barium salts are active poisons. The only precautions necessary with barium sulphate is to protect the worker from its dust with proper ventilation and approved respirators.

Another important pigment that can be classed among the inerts is titanium dioxide. All information available points to its being entirely harmless as the refined grades are used in the cosmetic field with the approval of the Food and Drug Administration. Numerous experiments have shown that the feeding of large doses of titanium dioxide over long periods of time to dogs, cats, guineapigs, and rabbits showed no deleterious effects. Noel Heaton made extensive research on titanium dioxide as recorded in the *Journal of the Society of Chemical Industry* (London, England, 1930; 143-50T) and reported as follows:—

Extensive experiments were carried out with rabbits and guineapigs. They were given every conceivable opportunity of absorbing the pigment by eating it, breathing air laden with its dust, having it rubbed on skin, etc., and the results were entirely negative. The animals seemed to thrive on it.

Then to prove its harmlessness to humans, he subjected himself to tests by taking the titanium dioxide in a similar manner to that used in an X-ray meal. About a pound of the pigments were stirred up into a sort of porridge with water and a little glucose and swallowed after starving for twenty-four hours in order to eliminate previous meals and insure that the ailmentary canal should be completely exposed to the mixture. The progress of the pigment through the body was watched by means of an X-ray tube and fluorescent screen and radiographs taken at intervals. The whole system was exposed to the effects for twenty-four hours and he reported that he never felt the slightest ill effects and if anything, his health improved after the experiment. This did not cover an inhalation test but this should be treated as other inert dust and the worker protected by usual means of respirators and ventilation.

Lead and Antimony Pigments

In the case of titanium-lead combination, there is about 5 percent of free lead oxide, and, while the combined lead is relatively insoluble, all workers should have the same precautions as when using lead pigments.

Titanium pigments combined with antimony should receive the same careful attention as straight antimony oxide, and the workmen should wear respirators and gloves and frequently change their clothing.

The lead pigments are poisonous when assimilated in the body, but if proper precautions are observed there would be few cases of lead poisoning, and the majority of these would be individuals who are allergic to this particular substance. In handling lead-bearing pigments, the worker must exercise due caution in cleanliness, use respirators to prevent inhalation of the dust, and proper ventilation should be provided to carry away dust and fumes. Several companies manufacturing and handling lead pigments require all employees to wear clean overalls furnished by the company, and they wash their hands and face before eating and brush their teeth, and then at the end of the day's work they should take a shower, using plenty of soap, and again brush their teeth. As for the painters and others that come only into contact with the finished paint and do not have a dust problem to contend with, it is just a matter of cleanliness to prevent lead poisoning. It is the consensus of opinion of chemists who are in daily contact with lead pigments that the majority of painters who have attacks of so-called "lead poisoning" are either suffering with some other trouble or have brought it on themselves by either chewing tobacco or eating without properly washing their hands.

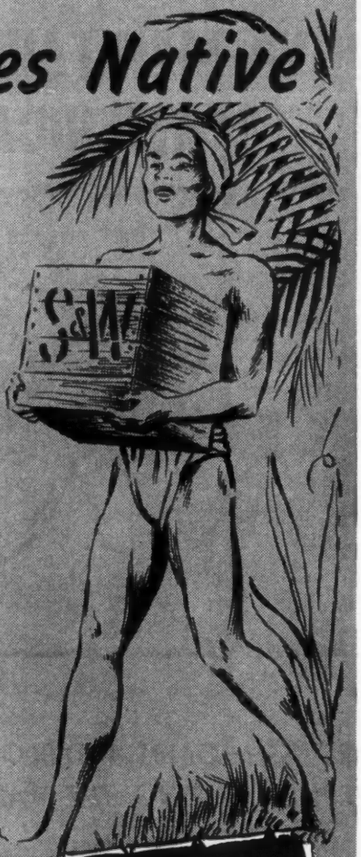
Arsenic, antimony, and cadmium are metals belonging to the same chemical family as lead, and some are more toxic and others less, but anyone working with any of their compounds should exercise the same precautions as when working with lead, and in the case of arsenic be more careful.

Zincs and Organics

Zinc has shown by experience, and it has been corroborated by public health reports, that it is not poisonous like the lead-arsenic-cadmium-antimony group, but certain of its salts are irritating. Zinc oxide, carbonate, and stearate have been used for years in cosmetics. Surveys of waters in zinc-producing areas have been made and water containing as much as 50 parts of zinc per million has been regularly used for human consumption over long periods of time and has shown no evidence of causing illness, either acute or chronic.

Where acid-bearing food has been stored in contact with zinc, it dissolves off enough of the metal to cause a decided irritating effect when it comes in contact with the hydrochloric acid in the stomach. The chill and fever known as "zinc fever" to the worker has been known to occur when the oxides of other metals are inhaled, and records show that a similar fever can be pro-

Varnish Industry Goes Native



MANUFACTURERS of finishes are taking interest in the complete line of S & W Natural Gums, now even more useful because of additional oils not obtainable years ago. These Gums are available in many types and grades, with a wide range of properties as to hardness, solubility, color, uses, etc., *to supplement Synthetic Resins.*

Years of experience in the Resin field, together with the advantage of closely co-ordinated research and technical data on both the S & W Synthetic and Natural Resins, have enabled us to be of direct service to the trade under the present unusual conditions.

Our technical facilities are at your disposal.

THE COMPLETE RESIN LINE

S & W Naturals

Accroides	Congo
Batu	Pontianak
Batavia Damars	Manila
Singapore Damars	Loba
Black East Indias	Elemi
Pale East Indias	Kauri

S & W Synthetics

"S & W" ESTER GUM—all types
"AROFENE"*—pure phenolics
"AROCHEM"*—modified types
"CONGO GUM"—raw, fused and esterified
"AROPLAZ"*—alkyds

*Registered U. S. Patent Office

STROOCK & WITTENBERG Corp.

60 EAST 42nd STREET NEW YORK CITY

duced by the inhalation of magnesium oxide. All these troubles can be eliminated by proper ventilation and the wearing of dust masks.

Toluidin reds, para reds, the lake colors and toners are mainly a hazard to the respiratory system, and their chief effect is that of any dusty substance, and they do not seem to possess marked toxic effects like some of the intermediates that are used in their manufacture.

In all pigments that contain compounds of toxic metals the same precautions should be used as is necessary in handling other compounds of the same metal. For example, in handling chrome greens and chrome yellows, the same care should be exercised as in handling lead carbonate, and there will be no reason for the workman to become affected.

Varnish Fumes

The drying oils used in the paint, varnish, and lacquer industry are not toxic in the sense of contact, although some of them would affect the person who would take them internally, and we have never found any record of processors being affected by the vapors except when exposed to the irritating effects of hot oil vapors in a poorly ventilated plant.

In varnish-making, the fumes and vapors of the resins are always present that are being processed and, whether they are natural or synthetic, they evolve vapors that are irritating to the eyes and respiratory organs. Although we found no record of a permanent injury from close proximity to these fumes, there should be better precautions taken than are found around most varnish plants. The varnish-making industry has progressed rapidly in the last few years in the manufacture of new synthetic finishes, but the majority have made very little effort to modernize the varnish plant. In the paint plant they have installed new modern high-speed equipment and closed types of mills, etc., but the average varnish plant still has its open stacks with gum-running pots, set kettles, and attendant appurtenances that have been standard with the varnish-maker for generations. The varnish-maker has progressed to the point where he does not need a plug of chewing tobacco or an old shoe to make his batch come out right, but a well-ventilated cooking room would remove the noxious fumes that are present in most plants. This means forced draft in the stacks and exhaust fans with a large enough capacity to remove the contaminated air as fast as the mixture is formed.

In handling the volatile organic solvents there will be considerable loss, also contamination of the air if the process is not carried on in closed mixers, and adequate ventilation should be provided to carry off all fumes. The amount of vapors should be checked constantly to prevent explosion and fire, as well as to protect the worker against the deleterious effects of these fumes and should any amount be present the persons who come in contact with them should wear masks that will afford protection from this type of vapor.

Volatile Solvents

We have a class of solvents and diluents of coaltar origin that are toxic when their vapor reaches certain concentrations in a room. The one that is considered the most dangerous by the public is benzol, but its concentration must exceed one hundred parts per million parts of air before it is termed dangerous. This means that more than one-third ounce must be vaporized in each thousand cubic-feet of air. With solvents of this nature the proper precautions must be taken to prevent the concentration of the vapor from reaching the danger point, and if proper ventilation is provided there will be no hazard involved either from explosion or toxicity.

All volatile solvents, with the exception of water, are considered poisonous and the only difference is of degree. Each has an allowable safety zone, but it is a difficult proposition to establish a basis of comparison because to one expert it might mean a lethal dose; to another a concentration that would produce asphyxiation; and to another it would be the concentration necessary to affect the health of the person breathing the vapors.

In the lacquer and enamel industry are used such materials as ethyl alcohol, propionate, butyl phthalate, amyl acetate, alcohol, methyl alcohol; ethyl acetate, ethyl carbonate, ethyl phthalate, butyl propionate, butyl phthalate, amyl acetate, acetone, toluol, and myriads of others, each possessing a different degree of toxicity but none are considered dangerous when properly used.

The manufacturers report that they have no problem regarding the health of their workers, as the materials are all manufactured and handled in closed systems that prevent escape of the vapors into the working environment. At any time the workmen are subjected

DRUMS RECONDITIONED

CLEANED • TESTED • DENTS REMOVED
BAKED PAINT • RELINED (HIGH TEMP.)
Most Completely Equipped Modern Reconditioning Plant
ESTABLISHED 1920
NEWARK STEEL DRUM CO.
C. J. COLVILLE, President
LINDEN, N. J.
Phone 2-4466

RIDBO LABORATORIES, INC.
ANNOUNCE
A SERIES OF PROCESSES FOR ACCELERATING BODYING AND DRYING OF
LINSEED OIL
AND OTHER OILS

These processes are covered by the following U. S. Patents:

2,189,772	1,985,230	1,985,231	2,007,958
2,213,944	1,980,366	1,957,437	1,963,065
2,234,949	1,980,367	2,213,943	2,234,545
2,180,342	2,106,708	2,244,666	

and a number of applications now pending at the U. S. Patent Office

RIDBO LABORATORIES, INC.
113 East Centre Street Nutley, N.J.

MAPICO COLORS
PURE OXIDES OF IRON
are being used
extensively in the program for NATIONAL DEFENSE
MAGNETIC PIGMENT CO.
MANUFACTURERS
BINNEY & SMITH CO., Distributor
41 EAST 42nd STREET, NEW YORK, N. Y.

to high concentrations of the vapors, they use gasmasks to prevent breathing them and there are no other effects to combat.

This means that the paint, varnish, and lacquer manufacturer must provide similar closed systems in the handling of all this class of material and also provide adequate exhaust ventilation to remove all dangerous concentration of vapors that might accidentally be discharged where the worker would breathe it or where a fire or explosion hazard might prevail.

Petroleum Solvents

The petroleum solvents are another class of material used extensively around paint, varnish, and lacquer plants as a solvent, thinner, or diluent. They are considered nontoxic except in very high concentrations, but like other vapors they should be carried away by a proper exhaust system so as to avoid fire and explosion hazards as well as affecting certain workmen who are allergic to this type of solvent.

It is a common occurrence for a few workers that handle naphthas to break out in a rash that will continue to give trouble until they are moved on another job where they do not come in contact with this type of solvent.

As mentioned before, the painter who uses any of these materials will not be affected when applying by brush, provided he works in a well-ventilated place and is careful to wash off all the paint and varnish material from his hands before eating or handling anything he might put into his mouth.

With spray painting, where all the material is atomized to the point of dust and is floating in the air, all precautions should be observed that apply to handling the raw materials. The workman should wear a type of mask that is approved by the Bureau of Mines, and adequate ventilation should be provided. In cases of spray booths, they should be fireproof with exhaust fans of a capacity to carry out all dust and vapors immediately as they are formed.

Production Problems

Many timely production problems were as usual discussed in the open forum conducted by the plant managers committee under the chairmanship of J. F. McMenamin. The discussions summed up as follows:—

Priority Procedures

A manufacturer may apply for preferential rating on any material at any time; but the rating he gets will depend on the necessity of the material in the defense program as set out in priority regulation No. 1. Defense ratings range from A1 to A10; civilian-use preferences from B1 to B8. To get a rating better than A10 application must be made on form PD1 to OPM and full, accurate data must be given. Paints, varnishes, and lacquers are not on the critical list, but many materials used therein are thus or otherwise restricted and PD3 certificates apply. To get these it is necessary to prove requirements are for defense or to follow rules laid down for control of industries or of materials.

Viscosity Measurement

The Ford cup is easy and rapid to use and fairly easy to cleanse, but it is erratic under certain conditions. The Stormer viscosimeter is rapid in mass operations and is easily cleaned, but it gives no direct readings and the level of the liquid affects results. The Gardner mobilometer has the widest range and gives true absolute viscosities. It is a nuisance to clean; wear requires periodical recalibration; and there is a variety of reliability among various makes.

Resin Materials Outlook

Production of phenol, which was 96,000,000 pounds in 1940, has increased somewhat this year and may reach 115,000,000 pounds in 1942. Production of phthalic anhydride increased from 57,000,000 pounds in 1940 to about 75,000,000 pounds this year and is expected to reach 100,000,000 pounds in 1942. This year's production of formaldehyde will be materially above the 180,000,000 pounds of 1940, and 1942 production is forecast at about 225,000,000 pounds. Glycerin production this year is expected to exceed that in 1940 by about 3,000,000 pounds. Next year's output is doubtful; it may be substantially increased by production from petroleum. None

STEARATES

ZINC STEARATE • CALCIUM STEARATE
ALUMINUM STEARATE • MAGNESIUM STEARATE

STOCKS AT

NEW YORK CHICAGO ST. LOUIS
KANSAS CITY DALLAS LOS ANGELES
SAN FRANCISCO SEATTLE

FRANKS CHEMICAL PRODUCTS CO.
BUILDING 9, BUSH TERMINAL BROOKLYN, N.Y.

of the expected increases if realized may provide more of the materials for resins for the paint industry. Especially in respect of phthalic anhydride will increased production of explosives lay a very heavy demand on production; it is forecast that 20,000,000 pounds more phthalates will be required for smokeless powders, and the production of synthetic "rubbers" also will require large quantities.

Earth Colors

Domestic earth colors will satisfactorily replace imported materials in substantial degree. Domestic yellow ocher is not too abundant and is being called upon to replace chrome yellow. Domestic grades are close to French. There is no shortage of raw umber and none is likely within a year. Transportation is a problem, however, and so are calcining costs. Domestic numbers require more blending than Turkish, but are good replacers, being as fine but not so soft. Burnt runs 10 percent to 20 percent stronger; raw is a little stronger. The chief difference from Turkish umber is a smaller content of manganese oxides which gives a lower reactivity. Domestic crude sienna has largely replaced imported for some time because of smaller oil absorption. There is an adequate supply, but some lots require toning for uniformity. Burnt is more difficult to supply because of calcining costs and lack of capacity. Transportation is a problem. In mass tones the domestic approaches the Italian; it is as fine, but not so soft or so strong or so clean in reductions.

Solvent Recovery

With respect to solvents used in cleaning tanks and mills the common recovery practice appears to be to tank it, let it stand for settling, and use the composite supernatant liquid as a vehicle. In some plants the settled liquid is distilled with steam to get rid of oil and other solubles and the volatile drawn off from the water in a separating tank.

Measuring Paste Body

There is no general practice in measuring the consistency of pastes. The Gardner mobilometer is a satisfactory apparatus when used with large orifices. A modified type has been made, with a plunger with holes and a stem which can be weighted to 6,000 grams. The Gardner putty test of squeezing between glass plates and measuring the spread is sometimes used.

Substitute Containers

There has been some interest in tin cans for use instead of scarce steel pails in 5-gallon sizes, but no adoption of these has been reported. There was a general belief that the steel container situation was getting easier. Experiences with wooden kits, kegs, or barrels were related, but wooden containers are not easy to get. Intentions to turn to wooden-jacketed tin cans were expressed. Some use of glass containers in small sizes was reported. Experiments with the reuse of steel pails showed that these could be restored for about 25 cents apiece; although, it was said, interior coatings were sometimes damaged.

Mill Speed

Speed of milling makes no difference on the durability of a house paint, if the operation is right. The same is true with respect to different types of mills and different methods. Ageing also does not impair durability.

Alkyds in Floor Enamels

Satisfactory floor enamels can be made with alkyd resins. A specific alkyd is being offered for such use. Straight alkyd formulas now being tried show excellent possibilities.

Tung Oil Substitutes

It was the consensus that there is no other top coat varnish formula, aside from an alkyd, which equals a tung oil-phenolic resin varnish for durability. Satisfactory drying can be got with a clear varnish of oiticica oil and East Indian resins. Such

PAINT PROTECTS AMERICA

The Paint Industry is bound to play an increasingly important part in the present National effort—and, *judged by past performance*, it can be confident of success...Few industries have contributed so richly to our country's progress over so long a period of time. None have surpassed our industry in furthering the welfare of the American home and business...The Murphy Varnish Company takes pride in having rounded out more than 75 years of service in so important a field.

Murphy Varnish Company

NEWARK SAN FRANCISCO CHICAGO

STRICTLY PURE Euston BASIC CARBONATE WHITE LEAD EUSTON LEAD CO. SCRANTON, PENNA.

TITANOLITH

CADMOLITH

ASTROLITH SUNOLITH Lightproof-Opaque Lithopone

AMERICAN ZIRCONIUM CORP. BALTIMORE, MARYLAND ZOPAQUE TITANIUM DIOXIDE 50 POUNDS NET THE CHEMICAL & PIGMENT CO., INC. BALTIMORE, MARYLAND -- SOLE SALES AGENT

RED METROX LEAD

NELIO •PURE GUM• ROSIN

CADMIUM RED

We all appreciate the patience and cooperation of our customers and friends during this period when our production is being pushed to capacity.

CHEMICAL & PIGMENT COMPANY
COLLINSVILLE, ILL. BALTIMORE, MD. OAKLAND, CAL.
Sunolith Lithopone — Cadmolith (3 shades yellow)
Astrolith Lithopone — Cadmium Red (5 shades)
Zopaque (Sole Sales Agents)

METALS REFINING COMPANY
HAMMOND, IND.
Red Lead — Orange Metal
Litharge — Cuprous Oxide

E. W. COLLEDGE COMPANY
JACKSONVILLE NEW YORK CLEVELAND CHICAGO SAN FRANCISCO
Nelio Rosin — Anti-Skinning Agents
Sunny South Turpentine — Naval Stores

EUSTON LEAD COMPANY
SCRANTON, PA.
White Lead (dry or in oil)

FIRSTOLINE TRADE MARK
GENUINE FRENCH PROCESS ZINC OXIDE
SPECIAL ZINC PIGMENTS — METALS AND METAL POWDERS

ZINC OXIDE

GENUINE FRENCH PROCESS
For All Pharmaceutical, Cosmetic and Industrial Purposes

SPECIAL ZINC PIGMENTS

Firstopone No. 30
Firstopone No. 35
Firstopone No. 50
Carbonox No. W3
Carbonox No. G3
Crystalox No. W.2
Crystalox No. G.2
Metalox No. 819
Etc.

ZINC DUST, ALL GRADES

COPPER SULPHATE
All grades in small and large crystals, granular and snow
Monohydrated

NICKEL SULPHATE

ZINC CARBONATE ZINC SULPHATE TITANIUM DIOXIDE

AMERICAN FIRSTOLINE CORPORATION
420 Lexington Avenue New York, N. Y.
Telephone: MU 3-5820

coatings have a good resistance to cold water but are less resistant than tung-phenolics to hot water. They may slightly whiten in salt water but will recover their appearance. Linseed-oiticica vehicles are equal to the best in pigmented undercoats but are not so good in clear varnishes or as top coats. Study of stillingia oil as a substitute for tung oil was advised. Its plant, a tree (*Stillingia sebifera*), was said to be easily grown in the South in moist regions. The oil has an iodine number of 166.

Luster of Titanium Flats

Low luster can be obtained uniformly with flat paints containing titanium dioxide if the wall surface is preparatorily properly sealed.

Adding Solvents in Varnishes

The process of thinning varnishes can be reversed and the hot "cook" run into the solvent if this is done in a tightly closed tank, preferably under ground, equipped with an agitator and a safety valve. It is best to run the two into the tank simultaneously. Temperatures of 450° to 470° F. of the nonvolatiles have been practicable. An asbestos jacket on the tank is desirable to maintain the temperature. Precipitation can be avoided by choice of proper solvent and appropriate proportioning of the liquids as they are mixed. A special pump is helpful. There is some doubt whether this reverse method is suitable for all formulations. The point was made that the important step in any method is to see that the first 10 percent of thinner is properly incorporated.

Nickel-Clad Kettles

No experiences with nickel-clad varnish kettles were offered in response to an inquiry. One superintendent said that he had tried a sprayed-on monel-clad kettle and that the coating had lasted but three months.

$CaCO_3$ in Outside Paints

Specifications for outside paints banned calcium carbonate several decades ago largely because of prejudices on the part of a few large users. This was attributable to excess alkalinity of the material then available. Another reason was that calcium carbonate hindered the exact assay of lead content of paint, while silicious extenders facilitated it. Calcium carbonate available today, with the proper small particle size and low alkalinity, free from water-soluble alkali, is satisfactory in outside paints if not used to replace some material whose acicular form is helpful.

Black Enamels

The best clear vehicle for a black varnish is one with good wetting properties, fast drying, and properly clarified. Fossil gums, modified phenolics, modified maleics will work—a hard gum is necessary—in 25 to 35 gallon lengths, with 45 percent to 52 percent of solids. Oiticica oil or dehydrated castor oil is beneficial. Extra drier sometimes helps because carbon black adsorbs drying properties, but such enamels may wrinkle if not aged long enough. Moisture in the black is bad. Seeding is caused by poor wetting, poor or too hard grinding, or use of an over polymerized vehicle.

Crawling of Paints

Paint crawling is most common in midsummer when the first coat dries hard and is not wetted by the second. Straight lead-high zinc paints are the most troublesome. Addition of a little benzol to the second coat at time of application is helpful; so is similar addition of turpentine. There is less trouble with paints which contain titanium dioxide and magnesium silicate. Some wetting agents help in some cases; cobalt naphthenate was said to be good, and some of the sulphonated higher alcohols. Improperly cleaned surfaces are a contributor; quicker-setting vehicles help. Working for a better flow sometimes leads to crawling. Some pigments, red lead for example, will crawl if they are tightly milled; red lead mixed without grinding does not "break" on steel. Use of a little industrial alcohol or a

THE Defense program is taking a large portion of Woburn's products and will continue to get preference, but our increased facilities enable us to handle good quantities of material for other purposes also.

Woburn's outstanding quality Fatty Acids for synthetic resins, and Isoline (Dehydrated Castor Oil) make these products the leaders in their field. Woburn has been the pioneer of these materials and also of Isomerized Linseed (Conjulin) and Soybean (Conjusoy) Oils, for which patents are pending. Woburn is proud of its record in making these valuable contributions to the Paint and Varnish Industry.

WOBURN dependable PRODUCTS

WOBURN DEGREASING COMPANY of N.J.
HARRISON CABLE ADDRESS: WOBORE NEW JERSEY

Representatives in Principal Cities:

AKRON F. F. Myers Co.
CHICAGO Fred A. Jensen
CINCINNATI C. M. Durbin Co.
CLEVELAND J. H. Hinz Co.
DETROIT C. L. Hueston
MINNEAPOLIS Oscar J. Friend & Co.
PHILADELPHIA Geo. A. Rowley Co.
PITTSBURGH J. C. Ackerman
ST. LOUIS Nolte Brokerage Co.
TORONTO and MONTREAL W. B. Bate Co., Ltd.
LOS ANGELES — PORTLAND, ORE. — SEATTLE — SAN FRANCISCO Martin, Hoyt & Milne, Inc.

Warehouse Stocks at CHICAGO — CLEVELAND — DETROIT — LOS ANGELES — MINNEAPOLIS — OAKLAND, CALIF. ST. LOUIS — SAN FRANCISCO — SEATTLE

For our Canadian friends, ISOLINE is manufactured under Woburn's Canadian Patent, No. 390728, by WOBURN CHEMICALS LIMITED, TORONTO, ONTARIO

little ammonia water at the time of application was suggested. It was felt that the need is for something to be used by the applying painter.

Formula Labeling

Under present conditions of stringency of certain materials rigid State requirements of formula disclosure cannot be successfully met except by the use of substitute "sticker" labels. The simpler requirements of other States provide substantial flexibility. Where no formula labeling is required but it is desired to inform users, frank statements of changes necessitated by shortages are useful. State officials, it was said, are usually tolerant if properly informed of controlling conditions. It was suggested that the industry's national organizations should furnish such information.

Nonsagging Agents

Sagging can be prevented or minimized by the use of (1) inorganic material, such as multifex or calcium carbonate, (2) metallic salts, such as zinc palmitate, zinc stearate, calcium stearate, aluminum stearate, (3) organics, such as soybean lecithin (this may after-yellow) or falkovar NS.

Gloss Reduction

Reduction of gloss of a second coat may be caused by the undercoat being too soft so that the solvents are more absorbed and the ratio of pigment and solvent is destroyed. A hard, glossy undercoat gives no trouble.

Aluminum Substitutes

In exterior paints aluminum may be satisfactorily replaced with nonchalking titanium dioxide plus lead—and maybe zinc—and an extender. Lead titanate is good. Aluminum powder may be extended with metallic lead.

Painting Lead-Coated Iron

No paint is needed on the lead-coated iron which is suggested as a replacer of galvanized sheets. An anticorrosive primer applied to a well-cleaned surface is satisfactory.

Paint and Defense

The intimate and essential relation of protective coatings to the program of national defense was stressed by Ernest T. Trigg, president of the National Paint, Varnish and Lacquer Association, in his address to the federation convention. The resulting situation he pointed out makes more than ever before necessary the thoughtful application of technical men to the problems of the industry. The paint industry, he averred, could survive only through mastery of the problems arising from defense diversion of its materials; he felt that it could keep going if it were not hampered in the utilization of its initiative, enterprise, and resources.

The industry must have adequate information on conditions with respect to supplies of materials and the demands therefrom for defense production. Only when so informed could it make proper use of its technical skill and ingenuity and plan its operations.

The national defense program, Mr. Trigg said, is the biggest industrial undertaking ever known. As such it taxes the men and materials and management resources of the nation. Its gigantic size makes confusion inevitable at least in the early steps, and he felt that the endeavors should not be unreasonably criticized. It was his hope that official defense activities would become more and better informed and would make its information fully available to industry in order that the road ahead might be recognized. He urged that none be discouraged, and he predicted that, although short and sometimes uncertain steps might meanwhile be necessary, there would come out of the pressing conditions most useful and interesting developments in industry and commerce.

Camouflage Work

The Engineer Board of the United States Army had an interesting model of the application of camouflage on exhibition in the paint show. The objectives and processes of camouflage, or protective concealment, were

UNIFORMITY—DEPENDABILITY

MANJAK

"Blackest of asphalts"—a dense black natural product with higher melting point than Gilsonite. Used for enamels, varnishes, japans, air drying and heat resisting blacks, rubber finishes, etc.

BONE PITCH

Also known as varnish maker's BLACK. Used as a toner in high grade enamels, japans, varnishes and composition goods.

STEARINE PITCH

Cottonseed, animal, vegetable in all consistencies. Guaranteed uniformity of melting point, penetration and color. We also rerun, blend and AIR-BLOW pitch to viscosity, acid, saponification and iodine specification.

NATURAL ASPHALTS

All types from all parts of the world—Barbados, Cuban, Egyptian and South American.

GILSONITE SUPER SELECTS

M.P. 275°F., low viscosity type, extremely bright, clean, easily melted. Also available in "fines" and refined form.

SAMPLES AND PRICES ON REQUEST. We also supply formulae wherever possible. Let us help you with your problem.

ALLIED ASPHALT & MINERAL CORP.
217 BROADWAY, NEW YORK FACTORY: DUNELLEN, N. J.

Agents and Warehouse Stocks in Principal Centers

BOSTON A. C. Nispel	CLEVELAND R. H. Keene & Co.	LOUISVILLE Wm. B. Tobler	PITTSBURGH Homer D. Butts
BUFFALO James O. Meyers	DETROIT Edw. R. Howell	MONTREAL Wm. Phelan & Co.	SAN FRANCISCO E. M. Wallis
CHICAGO Fred A. Jensen	LOS ANGELES A. J. Lynch & Co.	PHILADELPHIA Geo. A. Rowley Co.	SEATTLE Carl F. Miller & Co.
			TORONTO A. S. Paterson

PIGMENT COLORS

for EVERY Job . . .

For the ultimate in strength, cleanliness, permanency and ease of grinding, investigate our line of standard pigments — it will pay you dividends.

Working Samples Sent Promptly on Request

ANSBACHER-SIEGLE CORPORATION

Manufacturers of Fine Chemical Pigment Colors

General Offices, Works, and Laboratories:
ROSEBANK, STATEN ISLAND, NEW YORK, N. Y.

Boston Chicago Los Angeles Cleveland Detroit San Francisco Richmond Toronto, Can.

Highest Standard

Lake Colors
Fast Toner Lakes
Bone Black *Drop Black*
Ivory Black *Carbon Blacks*
Oxides, all shades
Genuine Van Dyke Brown
Genuine Sap Brown Crystals
Cadmium Yellows
Cadmium Reds
Permanent Greens
Aniline Colors
Ultramarine Blue, Red, Green and Purple
Wood Stains

Import — Export

FEZANDIE & SPERRLÉ, Inc.
205 FULTON STREET NEW YORK
Telephone COrtlandt 7-1460-1461 Cable Address "Fezan New York"

explained by Capt. Oscar S. Larabee, who is liaison officer between the Engineers' Board and the production men of the paint industry.

The objectives of protective concealment are (1) reduction of visibility, (2) complete concealment, (3) changing apparent identity, (4) decoying and deceiving. The processes must be designed to meet the needs in area, or mass bombing, and in selective, or precision bombing. They must supplement the difficulties laid by enforced high flying, by the angle of view, by the brief sighting period, by thick weather, and by night obscurity. Particularly must they meet and defeat the possibilities of photographic reconnaisance, including infrared photography, and trained visual observation.

Articles of camouflage must have form, bulk, shadow, and texture which are confusing and difficult to identify. They must not be glossy. They must take advantage of tonal values inhibitive of good photography. Paints come in for tones and texture.

There is need, Captain Larabee said, for research and development in formulas; few available paints are fully satisfactory. Substitute materials must be found to guard against shortages. New methods and new needs must be matched with appropriate materials.

Captain Larabee showed two motion pictures of camouflage preparation and processes.

A special committee of the federation with members in all constituent clubs was formed during the year to work with army officials in the camouflage program. Its chairman, John C. Moore, of the Sinclair Refining Company, Marcus Hook, Pa., explained the functions of this group. Some of the projects on which work has been started were reported by other members.

Paints for Concealing Roads

Paints for concealing roads, railroad lines, and other vital points were discussed by Paul L. Lotz, of the New York club, who explained how these are to be applied by means of watering carts or tar-spreaders. The enormous quantities of paint required raise big problems of materials. The best paint is one of 40 percent to 50 percent pigment volume, containing high-hiding pigments and fibrous talc.

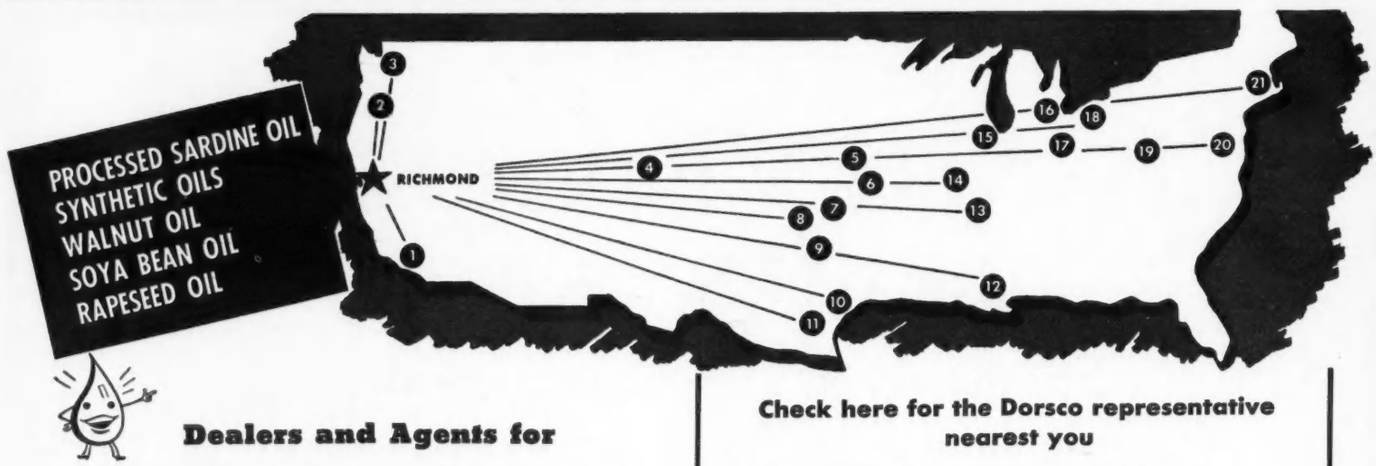
Spirit coatings have been tried out using Manila or Batu gum. These dry rapidly and have excellent durability. An alternate oleoresinous vehicle of linseed, dehydrated castor, or oiticica oil with a modified phenolic resin is promising. The New England club suggests also 15-gallon linseed oil-modified phenolic and 5-gallon linseed oil-limed rosin. The Los Angeles club is experimenting with diatomaceous earth as the extender and also with cold-cut rosin and zinc stearate. It has found casein vehicles lacking in durability in wet weather.

Emulsified Paints

Studies of resin and oleoresin emulsions were reviewed by D. H. Parker, of the Philadelphia club. These are offered as paste and as powder with a protein-type (casein) binder, chosen for stability and working experience. Through cooperation of manufacturers of water paints the quality has been approved and a new tentative specification set up, no change being made in the vehicle, to avoid foaming when used in a spreading machine. Tinting strengths for dark blue and dark green have been introduced, and the mildewing test has been changed.

Silicate Paints

In the investigation of emulsified coating silicate vehicles have been studied. Guido Henry, of the Philadelphia club, said that this study was started from scratch. He said that silicate of soda has the advantages of being thinnable with water, reducing fire hazards, low cost, ready availability, and reasonably nonfreezing. A silicate of 3.25 SiO to 1 NaO is best. Sugars, starches, polyhydric alcohols, and oils have been tried as flexibilizers. The original sizing of the Osnaburg cloth used in camouflage hampered wetting; others have been tried, and metallic salts have been



Dealers and Agents for

DORSCO MARINE & VEGETABLE OILS

Today dealers and agents in twenty-one cities throughout the United States can supply you with DORSCO high grade oils for the manufacture of paint, varnish, linoleum and other chemical products.

This extensive distributor organization, pictured above, has grown out of steadily increasing demand for these high quality products. We could say a lot about the careful laboratory control and the modern equipment used in refining and processing these oils for your use —but the best proof of what they might do for you is this evidence of how their use is spreading.

Processed High Iodine Number California Sardine Oils. Synthetic "Fast-Drying" Oil. Synthetic "Non-Drying" Oil. Walnut Oil. Soya Bean Oil. Rapeseed Oil. Herring Oil. Sumatra Palm Oil. *Special oils made to order and guaranteed true to your specifications.*

DORWARD & SONS CO.
260 California Street, San Francisco
Refinery: Richmond, California

DORSCO

Check here for the Dorsco representative nearest you

- **1 Los Angeles, Calif.** C. L. Duncan Co.
- **2 Portland, Ore.** Van Waters & Rogers, Inc.
- **3 Seattle, Wash.** Van Waters & Rogers, Inc.
- **4 Denver, Colo.** Thompson Hayward Chemical Co.
- **5 Omaha, Neb.** Thompson Hayward Chemical Co.
- **6 Kansas City, Mo.** Thompson Hayward Chemical Co.
- **7 Tulsa, Okla.** Thompson Hayward Chemical Co.
- **8 Oklahoma City, Okla.** Thompson Hayward Chemical Co.
- **9 Dallas, Tex.** Thompson Hayward Chemical Co.
- **10 Houston, Tex.** Thompson Hayward Chemical Co.
- **11 San Antonio, Tex.** Thompson Hayward Chemical Co.
- **12 New Orleans, La.** Thompson Hayward Chemical Co.
- **13 Memphis, Tenn.** Thompson Hayward Chemical Co.
- **14 St. Louis, Mo.** Thompson Hayward Chemical Co.
- **15 Chicago, Ill.** Thompson Hayward Chemical Co.
- **16 Detroit, Mich.** Western Rosin & Turpentine Corp.
- **17 Cincinnati, Ohio** M. J. Daly Co.
- **18 Cleveland, Ohio** J. H. Hinz Co.
- **19 Pittsburgh, Pa.** Homer D. Butts
- **20 Lancaster, Pa.** Nelson S. Landis
- **21 Boston, Mass.** A. C. Nispel

added to lessen the sensitivity of silicate of soda to humidity. Some pulp colors work well; some do not.

Although it may have some drawbacks for field use, silicate paint is excellent for industrial preparation of camouflage material.

Zein as Binder

Still on the subject of emulsified coatings, Byron Husted, of the Chicago club, reported on investigations of zein, the alcohol-soluble protein of corn. He described its dispersibility in water solutions and emulsions, and reported that coatings made with it have good stability and flexibility; that its gloss is about the same as a casein product; that its fire resistance is about the same as casein; its workability a little better. Generally, the research showed zein could be considered as a material slightly better than casein for the purposes under discussion.

Oil Emulsions

Frank Wagner, of the Philadelphia club, reported on consideration of oleoresinous water emulsions, from two points of view:—(1) Use in the field and (2) use in industrial establishments for coating camouflage fabrics. The oil-in-water type was chosen as best suited to give stability in all physical properties so that materials on which it was applied could be used in hot and cold weather. Drying tests and hiding property tests had been satisfactory in the case of all pigments employed, but he warned that choice of the emulsifying agent was important, as no one agent had been found for use with all available pigments. These paints can be thinned either with water or mineral spirits, though the spirits are costlier naturally and not suited for field use.

Adhesives in Camouflage

L. T. Work told of the search for adhesives for light and heavy duty in applying natural camouflage materials such as leaves, twigs, and the like to wood surfaces, to metals, to cloth, and on highway surfaces. Factors governing the inquiry were that the material should not possess gloss; that it should dry in thirty minutes; and that it should be economical. A wide range of bases has been included, ranging from animal glues, through oil-extraction residues, carbohydrates, rosins, silicates, asphalt emulsions, and others. This project has been in the hands of committees from many of the clubs.

Flat Coatings for Trucks

Ralph H. Everett, of the New York club, discussed flat coatings for industrial trucks and automobiles, which has been under consideration by the New York, Detroit, and Golden Gate clubs. Color permanence, drying, durability, and flexibility were the properties sought for. A lusterless project was considered best by all. The Golden Gate club had experimented with an alkyd product, but Detroit and New York worked on an oleoresinous base, considering the scarcity of alkyd resins. The Golden Gate club suggested a yellow color, while New York favored a dull gray. The purpose of the coloring was to distinguish trucks and automobiles which might be used in combat zones. A formulation has been worked out and presented to the engineer crops, but no details were given.

Luminosity and Fluoresence

Paul Blackmore, of the Cincinnati club, reporting for several clubs on their work in connection with luminous and fluorescent paints, described the several methods of activating the pigments and emphasized that, with much research still to be done, the greatest progress will come through pigments rather than through vehicles. Retention of brilliance and durability are the principal factors which must be considered from the camouflage angle. It has been determined that a greenish-yellow has the greatest visibility for signposts and posters.

Paints for Pipelines

Kenneth J. Howe, of the New York club, reported on standardizing paints for industrial pipelines, which project has been under consideration by New

—*Continued on page* 63

GRP

Direct Importers of

NATURAL RESINS

FOR

Varnish, Spirit Soluble, and Lacquer Purposes

Congo — Damar — East India — Pontianak — Manila — Elemi

● ●

Manufacturers of

Bleached and Liquid

SHELLAC

Carefully Processed Types
Developed in Our Laboratory
for Special Needs

●

Importers of

ORANGE GUM SHELLAC

● ●

Gillespie-Rogers-Pyatt Co.
Incorporated
80 John Street New York, N. Y.
FACTORY: JERSEY CITY, N. J.

THE ENGLISH MICA CO. *Keeps Ahead of the Times!*

Increased CAPACITY TO MEET *Increased* DEMAND *for* ENGLISH MICA PRODUCTS

Demand for our Mica has increased so much we have increased our plant and facilities. There is a big margin of safety in English Mica's extra capacity . . . and a big advantage in our low prices. During the past two years our Mica prices have not only NOT increased but actually have gone down.

NEW PLANT AT SPRUCE PINE, N. C.
TO BE COMPLETED IN DECEMBER

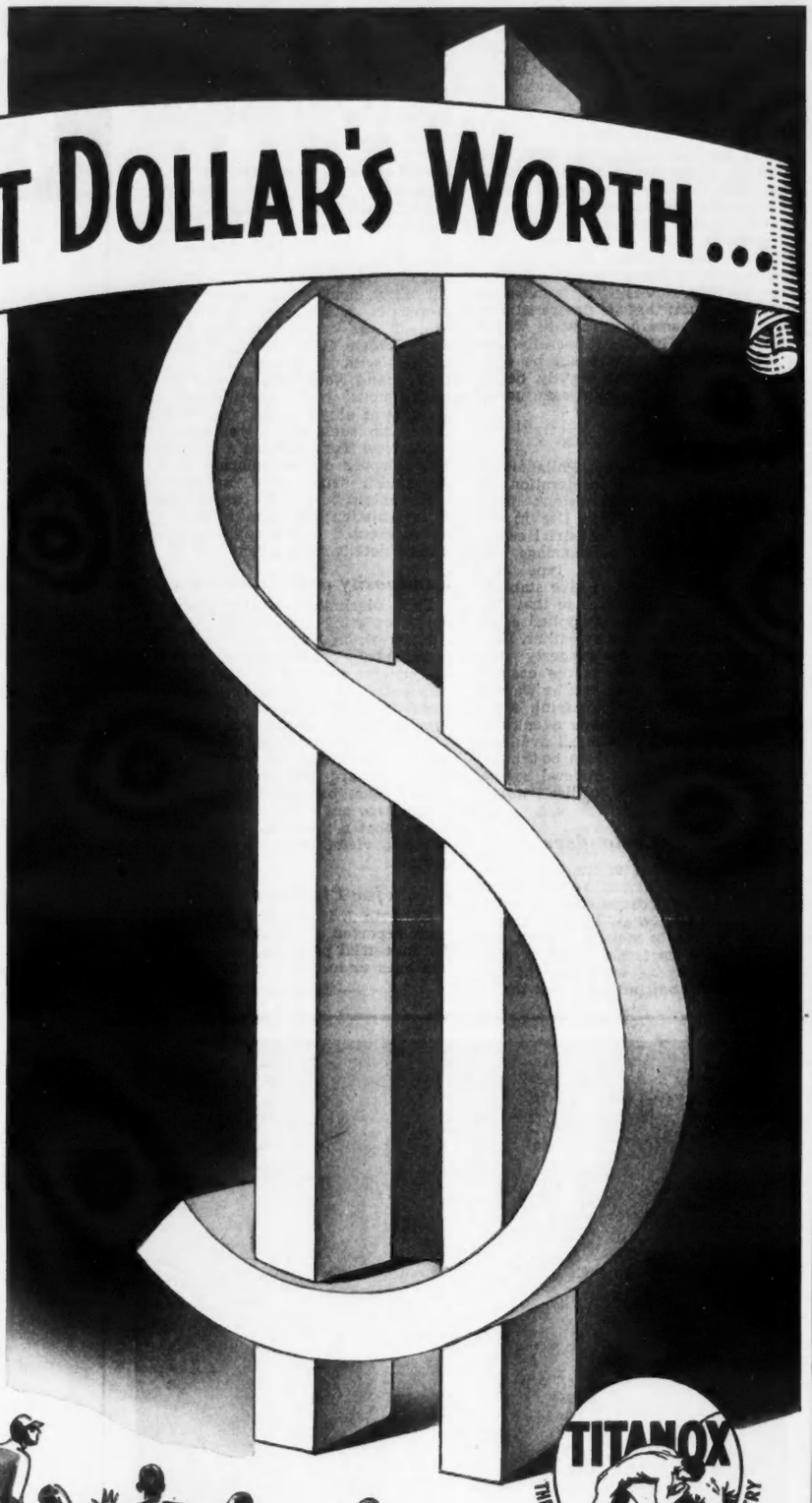
The English Mica Company has been the largest producer of finely ground Mica pigments and is now twice as large as any other producer of similar products.

Waterground Mica is used to stop checking and cracking and control chalking.

Micronized Mica has a fineness unheard of until recently. It is ideal in high grade paints and varnishes as a reinforcing pigment and flatting agent.

THE ENGLISH MICA CO.
220 E. 42 ST., NEW YORK, N. Y.

THE LARGEST DOLLAR'S WORTH... of



OPACITY, WHITENESS and BRIGHTNESS

With tinting strength of about 600, low specific gravity, fine particle size and high light reflectance

TITANOX-RC-HT

provides the highest value obtainable in white pigments.

TITANOX-RC-HT (rutile calcium pigment—high tinting)—the new pigment for interior use—is a type similar to TITANOX-RC, the new chalk resistant pigment for exterior finishes. TITANOX-RC-HT has hiding power of from thirty to forty per cent greater than that of normal titanium calcium pigments in both gloss and flat finishes.

•

This *new* pigment is particularly adaptable to the formulation of interior architectural finishes and other coatings where high opacity and high brightness must be obtained economically.

TITANIUM PIGMENT CORPORATION

SOLE SALES AGENT

111 Broadway, New York, N. Y.
104 South Michigan Avenue, Chicago, Ill. • National Lead Company (Pacific Coast Branch) 2240 24th St., San Francisco, Cal.

Our Paint Service Department will gladly supply samples and complete technical information upon request.

TITANOX
THE WHEEL HORSE OF THE PAINT INDUSTRY
REG. U.S. PAT. OFF.

TITANOX-RC

is one of the most highly chalk-resistant types of pigment ever produced, thereby making it suited to *exterior* coatings, both white and tinted. It has 90 to 100 points higher tinting strength than ordinary titanium calcium pigment which means at least 20 per cent more hiding at no extra cost.

•

TITANOX
TRADE MARK

Paint, Varnish, Lacquer Materials

Paint Markets Little Changed During Week—November Zinc Pool Set at 31 Percent of August Output—Zinc Oxide At 10 Percent—Rosin, Turpentine Quiet

There was little change in the market for raw paint materials last week. Priority ratings and defense rulings continued to play the more prominent roles in regard to most products. Scarcity became more acute in many directions, particularly in synthetic resins and colors with metallic bases.

The Office of Production Management ordered producers of metallic zinc to set aside during November an amount equal to 31 percent of their August production. The zinc oxide pool was established at 10 percent of August production. The market for lead oxides as yet has felt no affects of the pool order of two weeks ago. Producers continued to offer lead oxides in unchanged manner, and last week were merely awaiting developments.

The casein picture showed no new developments during the week, with prices remaining firm. Adequate shipping facilities continued to be a stumbling block to importers of the Argentine material, but offerings of the imported product were fairly large. Glues remained very tight and in heavy demand. Dry colors were firm, with supplies of certain types becoming shorter. Domestic carbon black demand was slower, but export call was taking up the slack.

No broadening of business was noticeable in rosin and turpentine last week. The movement into consuming channels was apparently steady, but new business was generally rather slow, consumers and dealers being disposed to await further developments. Price movements from day to day were moderate.

Metallic Lead and Zinc

Pig lead demand remained heavy during the past week. Stocks continued to dwindle. At the end of September stocks were only 13,148 short tons, a new low for many years. This compared with 15,330 tons at the close of August and 41,292 on September 30, 1940. Domestic shipments during September totaled 57,093 tons, against 55,005 in August and 53,456 in September, 1940. Production in September was 44,903 tons, compared with 51,157 in August and 51,551 in September last year. Slab zinc demand continued to run far ahead of available supply. Pool requirements for November were announced, as reported above. The zinc situation continued to give concern due to the short supplies. Production is being stepped up, but for the time being consumers are able to get only part of their requirements for ordinary civilian use. Prices were steady.

Butyl Alcohol

Total 1941 production of normal butyl alcohol, or butanol, has been estimated by the Office of Price Administration at about 155,000,000 pounds. About 70 percent of this will be derived from fermentation of molasses and corn and the remaining 30 percent from carbide synthetically.

The varied uses of butyl alcohol have created a very tight market situation, despite the estimated large production. A large part of the production goes into the manufacture of butyl acetate, but it is also in demand for production of smokeless powder, lacquers, artificial leather, dyestuffs, fruit essences, paint, varnishes, motion picture films and pharmaceuticals.

Two weeks ago the OPA established a butyl alcohol price ceiling at 10¾c. per pound for tankcar lots. Due to the tightness, however, only regular contract customers are able to get any part of their needs from producers. A resale market is in existence with material offered at about 23c. to 24c. per pound.

Price Changes

Advanced

None

Reduced

Turpentine, gum, 3½c. per gal.

Comparative Values

Index numbers compiled from eleven typical paint and varnish materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
137.9	137.9	137.9	126.2

Market news that may have developed after this report was sent to press will be found on page 4.

Lead. — Prevailing spot prices at New York, St. Louis and London for the period from October 25 to October 31, inclusive, were as follows:—

	Pigs		Spot. London.
	Per pound		Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0585@.0590	$0.0570	..* .. ..
Monday	.0585@.0590	.0570	.. .. ..
Tuesday	.0585@.0590	.0570	.. .. ..
Wedn'sd'y.	.0585@.0590	.0570	.. .. ..
Thursday	.0585@.0590	.0570	.. .. ..
Friday	.0585@.0590	.0570	.. .. ..

* London exchange closed.

Zinc. — Prevailing spot prices at New York, East St. Louis and London for the period from October 25 to October 31, inclusive, were as follows:—

	Slabs		Spot. London.
	Per pound		Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0865	$0.0825	..* .. ..
Monday	.0865	.0825	.. .. ..
Tuesday	.0865	.0825	.. .. ..
Wednesday	.0865	.0825	.. .. ..
Thursday	.0865	.0825	.. .. ..
Friday	.0865	.0825	.. .. ..

* London exchange closed.

Pigments

Antimony White.—Good call. Price steady.

Flake White.—Market fairly active. No change in price.

Litharge. — Demand held to fairly high levels. Movement was in good volume. Prices were unchanged.

Lithopone. — Demand very heavy. Producers allocating sales due to low stocks. Prices steady.

Red Lead.—Producers still able to accommodate most orders. Large demand reported. Prices unrevised.

Titanium Pigments. Consumers taking as much as possible. Not enough available to fill all orders. Prices unchanged.

White Lead.—Normal deliveries reported. Prices firm.

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 7

Association meetings:—

Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

HOOT MON! PARANOL 25

FOR A MON WI' AN EYE TO LOW COST PRODUCTION

Paranol 25 is a bonny buy . . . and the quality would truly surprise a mon wi' a searchin' pair of eyes!

And listen, mon! The way it works wi' softer oils will make your heart do a highland fling for glee. — Sshish! A sample and data dinna cost ye nothin'.

Our Technical Staff is at Your Service

PARAMET SYNTHETIC RESINS

PARAMET CHEMICAL CORPORATION
MANUFACTURERS OF SYNTHETIC RESINS
44TH AVENUE AND 10TH STREET • LONG ISLAND CITY, N. Y.

ULTRAMARINE Color..THAT'S ALL!

When you buy Calco Ultramarine, your money buys color—the kind of color you can depend on for tinting to whites or working with deeper shades—the kind of color that cuts your matching problems to the bone! Because our own precise processing assures uniformity in strength, shade and working properties—as well as superior fastness to light and alkalis. Special types are available, each superb for its purpose, for Paper, Rubber, Paint, Soap, Linoleum and Textile products. Write today, stating your needs for blue, and a free sample will be sent to meet your requirements.

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
BOUND BROOK Calco NEW JERSEY
Boston • Philadelphia • Providence • New York • Charlotte • Chicago

LAMP CARBON BONE **BLACKS** LAKE VINE OXIDE
C. J. OSBORN CO., 132 Nassau Street, NEW YORK
Established 1889

ASBESTINE
Reg. U. S. Pat. Off.
FOR PAINT MANUFACTURERS
INTERNATIONAL PULP CO., 41 Park Row, New York

DRUM CLEANING CHAIN

The only harsh abrasive for cleaning interior of steel drums and barrels
Two link sample and circular on request
THE VOL-U-METER CO., 59 Terrace BUFFALO, N. Y.

Crude, Refined, Processed
PAINT and VARNISH OILS
Sales Representatives
R. B. Huber
216 Tremont Street, Boston
Geo. E. Moser & Son, Inc., Detroit, Mich.
White & Co., Akron and Cleveland
Marshall Dill, Los Angeles
J. A. Kagan, Dierks Building, Kansas City, Mo.
Brice H. Boyet, Louisville, Ky.
B. & S. H. Thompson & Co., Regd. Montreal and Toronto
Garrigues, Stewart & Davies, Inc. 40 Rector Street, New York
CHINAWOOD OIL
PERILLA OIL
LINSEED OIL
SARDINE OIL
SOYABEAN OIL
OITICICA OIL
RAPESEED OIL
CASTOR OIL
GUM TURPENTINE
QUICKSILVER
Special Oils to Order
PACIFIC VEGETABLE OIL CORPORATION
Importers, Refiners, Manufacturers 62 TOWNSEND STREET, SAN FRANCISCO, CALIF. *4½ million gal. U.S. Gov't Bonded Tank Storage*

GET Brighton's quotation on all special Vessel Equipment for your processes. Brighton builds practical hard-working equipment of the best materials for each job and ships promptly, getting you into production fast!
BRIGHTON BUILDS . . . .
Extraction Equipment
Heat Exchangers
Stills of all kinds
Varnish Kettles and Trucks
BRIGHTON COPPER WORKS
CINCINNATI, OHIO

mineral pigments
NATURAL AND SYNTHETIC
PURE CHROMIUM OXIDES
are
STRONG - INERT - PERMANENT
C K WILLIAMS & COMPANY
EASTON·PENNSYLVANIA

Zinc Oxides.—All grades in heavy call. Sales allocated strictly. Prices unaltered.

Fillers and Extenders

Asbestos.—Movement remained large. Inquiries held to good levels. Prices were steady and unrevised.

Asphaltum.—Offerings were adequate to accommodate all orders. Deliveries were in good volume. Demand was well sustained. Quotations showed no change.

Barytes.—Market remained very active. Shipments were large and regular throughout the week. Offerings were normal. Prices were firm.

Bentonite.—Good call. Market active. No price changes.

Blanc Fixe.—Large movement of both direct process and by-product grades. Pulp in normal demand. Offerings satisfactory. Prices steady.

Charcoal.—Little of new interest. Offerings, demand, prices at unchanged levels.

China Clay.—Domestic material encountering active buying interest. Movement large. Good call for imported. Prices firm and unrevised.

Diatomaceous Earth.—All grades moving well, with offerings normal. No shortages reported. Prices firm.

Fullers Earth.—Movement of domestic material at unchanged levels. Pick-up in inquiry for imported product. Supplies believed adequate. Prices steady.

Graphite.—Few new developments. Demand well maintained. Prices steady.

Gypsum.—Good call reported. Demand picking up. Quotations unaltered.

Mica.—Market still showing signs of tightness. Movement fairly regular. Offerings made at unchanged levels.

Rottenstone.—Market slowing down slightly. Prices steady.

Silica.—Good call reported. Contract movement large. Spot demand well maintained. Prices firm and unrevised.

Talc.—Domestic supplies in good call. Canadian material moving well. Prices firm.

Whiting.—Market activity well sustained. Prices unchanged.

Woodflour.—Domestic material in routine demand. No Norwegian material available.

Driers

Demand for various drying products continued to hold to high levels during the past week. Many consumers were encountering difficulty in securing adequate supplies due to the scarcity of certain materials. Palmitates and stearates were very tight, with sales allocated to regular customers. Prices were steady and unchanged.

Dry Colors

Alkali Blue Toner.—Fair movement. Good call. Price unchanged.

Bone Blacks.—Demand held to good levels. Shipments routine. Prices steady.

Carbon Blacks.—Despite slackening of demand from rubber tire industry, this market was very active during the period. Other outlets picked up the slack. Shipments were heavy. Prices were firm and unrevised.

Cadmium Colors.—Market very tight. Metal scarcity still blocking any expansion in production. Demand very heavy. Sales allocated. Prices unaltered and firm.

Chrome Colors.—Shortage of raw material continued to limit production. Demand for the color was heavy, with offerings limited. Prices were steady and unchanged.

Iron Blues.—All types in excellent demand. Supplies short. Sales limited. Quotations firm.

Iron Oxides.—Demand running far ahead of last year. Volume of imports well maintained. Prices steady.

Lithol Toners.—Market at previous levels. Demand well maintained. Offerings smaller. Prices steady.

Mercuric Oxides.—Movement better than normal. Offerings limited.

Ultramarine Blues. — All grades moving well on contract. Spot market active. Prices steady.

Vermilion.—Previous quotation on quicksilver material unchanged. Demand continued to pick up, although buying was mostly in small-sized lots.

Synthetic Resins

Further tightness was reported in most synthetic resins. Certain types were unavailable except for defense work. Priority ratings played principal role in sales. Ester gum continued to become shorter and shipments were smaller. Prices were firm and unrevised.

Naval Stores

Rosin and turpentine continued rather quiet in Southern and local markets last week. The movement into consuming channels apparently held up well but uncertainty concerning price and other legislation at Washington had a tendency to keep new business within rather narrow bounds much of the time. There was also a disposition among some buyers to await the action of the markets for other commodities after the recent weakness and irregularity, and the same was also apparently true as to political affairs abroad. There were reports of some export purchases of rosin by South American countries though opinions differed as to the volume of such business. Inquiries from Europe and the Far East were apparently lacking.

Although supplies of turpentine are light and diminishing, the slowing down of business was reflected in a moderate setback at Savannah where sales were reported on Tuesday and Wednesday at 72c. per gallon as compared with 73½c. at the close of the previous week. The undertone of the market was still regarded as firm, however, and the recession in the price was looked upon as merely temporary in view of the strength of the statistical position. Stocks at Savannah showed a further shrinkage last week, and unsold supplies in the woods are believed to be unusually small for this period. Primary stocks of rosin also showed a further decrease and supplies of that commodity in the control of the government under loans to producers are diminishing much more rapidly as a result of lend-lease operations than had been anticipated.

Turpentine.—Quiet conditions continued to prevail in the local market, consumers being inclined to hold off or limit their purchases to small lots in the absence of anything stimulating in the way of market news from the South. Prices here followed the course of primary quotations.

Savannah, Oct. 31.—Following is a record of the turpentine market for the week:—

	Gallons		Barrels		
	Cents.	Sales.	Receipts.	Shipments.	On hand.
Saturday*	...	...	...	...	...
Monday	73½	5,800	10	673	12,295
Tuesday	72	10,450	627	101	12,821
Wednesday	72	7,000	141	152	12,810
Thursday	71	4,000	129	162	12,777
Friday	70	2,250	103	...	12,880

* No trading.

Chicago—Oct. 31

Jacksonville, Oct. 29. — Turpentine stock, 5,675 barrels.

Pensacola, Oct. 25.—Turpentine stock, 7,800 barerls.

Chicago—Oct. 31

Turpentine in good demand. Suppliers report they are experiencing increasing difficulty in making shipments. Ruling prices at the close of business last night were:—Five-drum lots, 86c. per gallon; five wood barrels, 91c.; single drums, 89c.; single barrels, 94c.

London, Oct. 31.—Turpentine, 68s. 6d. per cwt.

Rosin.—A steady or firm tone prevailed in the local market, as changes

in primary quotations from day to day were generally within narrow limits. In some quarters a fair request was noted, but as a rule purchases were limited to comparatively small lots, consumers being disinclined to operate in advance of immediate or nearby requirements.

Savannah, Oct. 31.—Following is a record of the rosin market for the week:—

	Price per unit—Low of range quoted					
	*Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	...	$2.51	$2.46	$2.46	$2.46	$2.41
D	...	2.51	2.49	2.49	2.47	2.45
E	...	2.51	2.49	2.47	2.47	2.47
F	...	2.51	2.49	2.47	2.46	2.46
G	...	2.46	2.45	2.42	2.42	2.44
H	...	2.46	2.43	2.44	2.44	2.44
I	...	2.44	2.43	2.42	2.44	2.44
K	...	2.45	2.44	2.44	2.45	2.47
M	...	2.58	2.58	2.57	2.58	2.58
N	...	2.68	2.68	2.68	2.68	2.68
WG ..	...	2.79	2.79	2.79	2.79	2.79
WW ..	...	2.91	2.91	2.91	2.91	2.90
X	...	2.91	2.91	2.91	2.91	2.90
	Barrels					
Sales....	...	385	351	366	346	486
Receipts.	...	357	818	427	283	399
Shipments	...	8,218	1,038	755	10	467
Stocks...	...	...	...	...	...	81,505

* No trading.

Jacksonville, Oct. 29.—Rosin stock, 274,812 barrels.

Pensacola, Oct. 25.—Rosin stock, 18,558 barrels.

Chicago—Oct. 31

Rosin is firm, with demand fairly active. Ruling prices at the close of business last night in five-drum lots:—B grade, $3.76 per 100 pounds net; G., $3.75; M, $3.88; W.W., $4.21.

London, Oct. 31.—Rosin, W.W., 33s. per cwt.

Other Naval Stores

Pine Oil.—Output moving steadily to local and other consumers. Resale oil scarce. Market firm.

Pitch.—Local trade fairly active. Spot stocks light. Tone firm.

Rosin Oil.—Purchasing generally along conservative lines. Market steady.

Tar.—Steady contract movement. New business fairly active. Quotations maintained.

Lacquer Materials

The increasing demands for defense work resulted in a still further tightening in the supply of many lacquer materials and solvents last week. In compliance with the order issued by the OPA establishing ceiling prices for acetone and butyl alcohol, producers, who advanced prices during the fourth quarter, were now quoting the ceiling schedule. No other price developments took place and the general tone remained firm.

Acetone.—Defense buying heavy. Business on allocated basis as a rule. Sellers generally adhering to new ceiling levels.

Butyl Alcohol.—Sellers under pressure to make all deliveries. Prices firm, and in line with ceiling levels established recently.

Cellulose Acetate.—Market underwent no change, with shipments moderately active.

Dibutyl Phthalate.—Most of material moved for defense work. Prices held firm.

Ethyl Acetate.—Situation continued tight. Prices failed to change and tone was firm.

Ethyleneglycol. — Seasonal factors together with defense requirements placed market in tight position. Prices rule firm.

Isopropyl Acetate.—Active inquiry, selling usually limited. Pricewise a firm tone prevailed.

Tricresyl Phosphate.—Market continued to reflect large requirements for defense work, and supplies for other use remain short. Prices firm.

Shellac

New undertakings in the shellac market, spot and forward, built a quite satisfactory total volume of sales by the close of last week. The flow of orders indicated that consuming requirements of the country were getting no smaller. With fair assurance that arrivals from Calcutta will continue in good volume, steady prices were a reasonable prospect. They were steady enough throughout the past week in a market notable for firmness of undertones and absence of anything like competition between suppliers.

Varnish Gums

Varnish gum demand remained active throughout the past week. No tightness as yet appeared in the market, with supplies believed adequate for nearby needs. Prices were firm and unchanged at primary and local centers.

Glues and Binders

Casein.—Demand remained very active during the past week. Prices were unchanged from the previous period. Importers were encountering difficulty in securing shipping facilities from the Argentine, although offerings were fairly large. Exports of casein from New Zealand during the first seven months of 1941 totaled about 500 long tons. Production is declining there due to lack of profit and the stimulation of cheese production, cutting the supply of available material. Output during 1941-42 is expected to fall to about 400 long tons. In the first half of 1941 the United States imported from Uruguay 393,200 pounds of casein. The 1940 imports from that country were 996,600 pounds, against 76,700 pounds in 1939.

Glues.—Demand continued to run far ahead of production and available supply. The market remained very tight with stocks low. Prices were steady and unchanged.

Resale Market

Various offerings in the resale market last week were on the following basis: acetone, 15c. to 20c. per pound; butyl acetate, 20c. to 24c. per pound, and butyl alcohol, 23c. to 24c. per pound.

Cincinnati Paint Club Elects Bond President

Cincinnati, O., Oct. 27, 1941

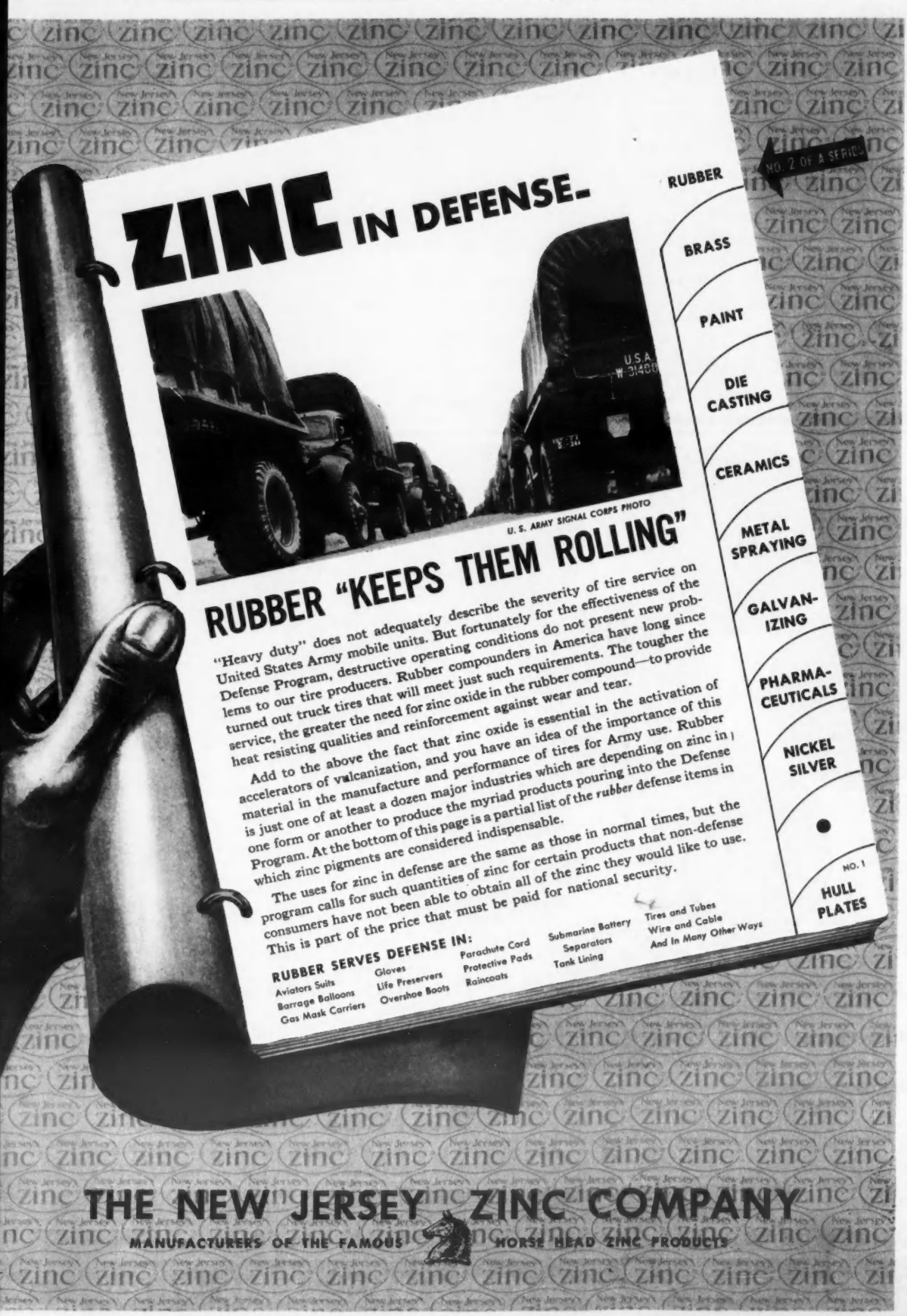
Henry R. Bond, of the Ault & Wiborg Company has been elected president of the Cincinnati Paint, Varnish & Lacquer Association. Other officers elected were:—Vice-president, George W. Schneider, jr.; secretary, Clifford Meyers, and treasurer, Harry J. Inderhess.

Carpenter Made President Of Indianapolis Paint Club

Charles Carpenter, of the A. Burdsal Company, Indianapolis, has been elected president of the Indianapolis Paint, Varnish and Lacquer Association. Others elected were Theodore Corbin, of Indiana Naval Stores, vice-president, and Hal Howe, secretary-treasurer, which post he has held for twenty-six years.

N.D. Paint Chemists Hold October Meeting

The North Dakota Paint Chemists' Club of St. Paul-Minneapolis held a meeting in October at the home of the clubs' new president, Rudolph Frigstad. A detailed discussion on plant procedures and safety measures was led by Don. Robbins.


ZINC IN DEFENSE-
NO. 2 OF A SERIES
RUBBER
BRASS
PAINT
DIE CASTING
CERAMICS
METAL SPRAYING
GALVANIZING
PHARMACEUTICALS
NICKEL SILVER
NO. 1
HULL PLATES
U.S. ARMY SIGNAL CORPS PHOTO
RUBBER "KEEPS THEM ROLLING"
"Heavy duty" does not adequately describe the severity of tire service on United States Army mobile units. But fortunately for the effectiveness of the Defense Program, destructive operating conditions do not present new problems to our tire producers. Rubber compounders in America have long since turned out truck tires that will meet just such requirements. The tougher the service, the greater the need for zinc oxide in the rubber compound—to provide heat resisting qualities and reinforcement against wear and tear.
Add to the above the fact that zinc oxide is essential in the activation of accelerators of vulcanization, and you have an idea of the importance of this material in the manufacture and performance of tires for Army use. Rubber is just one of at least a dozen major industries which are depending on zinc in one form or another to produce the myriad products pouring into the Defense Program. At the bottom of this page is a partial list of the rubber defense items in which zinc pigments are considered indispensable.
The uses for zinc in defense are the same as those in normal times, but the program calls for such quantities of zinc for certain products that non-defense consumers have not been able to obtain all of the zinc they would like to use. This is part of the price that must be paid for national security.
RUBBER SERVES DEFENSE IN:
Aviators Suits
Barrage Balloons
Gas Mask Carriers
Gloves
Life Preservers
Overshoe Boots
Parachute Cord
Protective Pads
Raincoats
Submarine Battery Separators
Tank Lining
Tires and Tubes
Wire and Cable
And In Many Other Ways
THE NEW JERSEY ZINC COMPANY
MANUFACTURERS OF THE FAMOUS HORSE HEAD ZINC PRODUCTS

Quality

SHELLAC

FOR BETTER LACQUERS

No. 908 SPECIAL LACQUER COMPATIBLE FRENCH VARNISH

Dewaxed and processed to give a low viscosity, highly compatible French Varnish for Lacquer Formulations.

Featuring

Low Acid Number
Free from Wax
Light Color

52% Solid Content in Anhydrous S. D. No. 1 Alcohol

FOR BETTER QUICK DRYING INKS

No. 101 Bone Dry Bleached Shellac
No. 65 Extra White Refined Bleached Shellac

Low Acid Number
Low Reactivity

Low Viscosity
Rapid Solution

Other shellacs to meet every specification

Ask for Working Samples

THE MANTROSE CORPORATION

136-146 41st Street : Brooklyn, N.Y.

Dry Color, Pigment Production: 1939

—Continued from page 5

For Sale and Interplant Transfers

	1939.	1937.
White lead (basic carbonate and sulphate):—		
Pounds	119,570,795	144,313,029
Value	$6,757,126	$9,450,759
Lead oxides:—		
Litharge:—		
Made for sale and for interplant transfer:—		
Pounds	164,454,772	165,628,019
Value	$9,230,853	$12,102,184
Red lead, minimum, and other lead oxides, made for sale and for interplant transfer:—		
Pounds	104,881,475	90,223,322
Value	$6,687,914	$6,751,961
Zinc oxide (Chinese white, zinc white), made for sale and for interplant transfer:—		
Pounds	301,895,235	321,889,816
Value	$14,431,992	$15,316,178
Lithopone:—		
Made for sale and for interplant transfer:—		
Pounds	288,083,956	325,099,884
Value	$12,526,749	$13,760,312
Blanc fixe (barium sulphate, precipitated):—		
Pounds	12,282,711	10,396,178
Value	$322,435	$278,186
Barytes (natural):—		
Pounds	279,194,200	†
Value	$2,367,502	†
Iron oxides, natural and synthetic:—		
Pounds	101,949,630	128,891,324
Value	$3,275,941	$4,067,840
Titanium dioxide:—		
Pounds	115,352,331	‡
Value	$14,906,151	‡
Other oxides:—		
Pounds	249,831,194	328,138,379
Value	$11,448,977	$22,458,369
Other mineral colors (including zinc sulphide):—		
Pounds	65,314,965	188,343,207
Value	$3,384,878	$8,430,224
Other fine color pigments (including vermilion and ultramarine):—		
Pounds	14,964,993	12,397,763
Value	$3,609,706	$2,689,443
Whiting:—		
Pounds	110,716,433	123,994,630
Value	$764,941	$866,736

* Revised.
† Included in "Other mineral colors."
‡ Data not available.

Hosken Made President Of Cleve. Production Club

At the annual meeting of the Cleveland Paint and Varnish Production Club, the following officers were installed:—President, C. R. Hosken, of the Arco Company; vice-president, R. Elmer, of Columbus Varnish Company; secretary, J. C. Weaver, of Sherwin-Williams Company, and treasurer, Al Batterman, of Forbes Varnish Company.

American Zinc, Lead Buys Process for Amer. Cyanamid

American Zinc, Lead & Smelting Company, St. Louis, has reported to the Securities Exchange Commission that on September 18, 1941, acting as agent for American Cyanamid Company, it purchased capital stock and assets of Wuensch Hetero Concentration Process Company, giving in full settlement therefor $25,000 in cash and three promissory notes aggregating $125,000. Latter were due $50,000 each Sept. 18, 1942, and 1943, and $25,000 on Sept. 18, 1944. Company received, on Sept. 18, 1941, from American Cyanamid Co., in reimbursement for purchase, $25,000 in cash and three promissory notes of American Cyanamid Co., in same amount and due on same terms as the notes company itself issued in connection with purchase.

Golden Gate Paint Club Announces Free Courses

San Francisco, Oct. 27, 1941

A series of free lectures on important phases of the paint industry are being given at San Francisco Junior College October 20, the Golden Gate Paint, Varnish and Lacquer Association has announced. Topics will include "The Romance of Paint," "Important Highlights in the History of the Paint Industry," "Substitutes and Their Relation to the Paint Industry," "New Synthetic Resins and Their Use" and "Solvents and Thinners."

R·T·VANDERBILT·CO·N·Y·S·AMERICAN PRODUCTS

RAYOX · RAYCAL · SURFEX · DURITE · PEERLESS CLAY · RAYBAR · RAYSIL · PYRAX · MULTIFEX · THERMATOMIC BLACKS

RAYOX—Pure Titanium Dioxide
RAYCAL—Titanium Calcium Pigment
SURFEX—Surface-Treated Calcium Carbonate
DURITE—Pure Phenolic Resin
PEERLESS CLAY—Domestic China Clay

RAYBAR—Titanium Barium Pigment
RAYSIL—Titanium Silicate Pigment
PYRAX—Ground Pyrophyllite
MULTIFEX—Colloidal Calcium Carbonate
THERMATOMIC BLACKS—Carbon Blacks of Low Oil Absorption

★

Write for Samples

EACH PRODUCT IS OF THE HIGHEST QUALITY IN ITS CLASS

R. T. VANDERBILT CO., INC. · 230 PARK AVE. · NEW YORK

Paint Production Men Confer

—*Continued from page* 57

York and Pittsburgh. Pittsburgh has recommended red for fire lines, yellow for gas lines, light-blue for water lines, and light-green for air lines, while New York has suggested red for fire, yellow for dangerous pipelines, green for safe lines, blue for protective lines, and purple for lines carrying valuable materials.

Paints for Buildings

Austin Allen, of the New York club, reporting on visual deception paints for industrial buildings, said that the prime factors were nonreflectivity, applicability to all types of surfaces, quick-drying properties, durability of at least two years, fast colors, and good repaint surfaces. Although many problems had been presented in the development of a flat, exterior-type paint as above, he felt that the formulation prepared would give results.

Lieut. A. W. Van Heuckeroth, formerly of the scientific section of the National Paint, Varnish and Lacquer Association and now with the camouflage section of the engineer board of the army, recounted the work in the past year to put the paint industry in a state of preparedness to meet any demands of the armed forces for camouflage and protective coatings. He paid tribute to the cooperative work of the industry's technical clubs and their individual members.

Federal Specifications

Briefly noting the work of paint technicians for years in connection with the promulgation of Federal specifications, Dr. H. A. Gardner, director of the scientific section of the National Paint, Varnish and Lacquer Association, told of the work now being done under defense exigencies by and with the technical committee of the paint and protective coatings industry in OPM. He pointed out that five representatives of the federation constitute advisers in this work, and he told of recent discussions with Federal purchasing officials of matters arising out of scarcities of materials and other influences on specified formulations.

Specifications have been changed for paints for shells so as to replace nitrocellulose coatings with oleoresinous, the paint technicians having developed a coating of the latter type that meets the ten-minute drying requirement.

The Post Office Department has agreed to change from alkyd to oleoresinous paints for mail boxes and to reduce by more than one half the alkyd content of paints for trucks.

Some 200 formulations have been prepared in an endeavor to convince the army buyers that OD paints can be made with far less glycerol phthalate and that satisfactory primers can be made without alkyds. The new formulas are being tested for durability.

Flaxseed crushers had reported that this year's linseed oil would average low for iodine number, might go to 170, compared with a Federal specification of 178. But, the crushers have recommended that the specification number be retained for the time, although advising that a change is to be prepared for.

The National Bureau of Standards has approved an emergency alternate specification for varnish which is slower-drying and calls for less tung oil.

Lieut. D. A. Metz of the army's Holabird Laboratory, explained that that agency approved only QMC contracts for priming coat, top coat, and lettering of motor equipment. It maintains a list of approvals for the guidance of manufacturers of such equipment and deals direct with such primary contractors. The new specifications, he said, do not give full consideration to shortages of materials, but do reduce the requirement of phthalic anhydride and allow alternates for zinc chromate.

Lieutenant Metz thanked the paint industry and its technical men for their helpful cooperation. He said that the aim in approvals was to be cooperative and to eliminate unnecessary uses of materials. He explained how manufacturers of paints or paint materials can get on the mailing list to get information on specifications. When a primary contractor says that he wants a certain paint, the agency will study that one at once. In ordinary procedure priorities are based on the date of receipt of manufacturers' submittings of products for consideration.

There is confusion in the new specifications, Lieutenant Metz said, and it is his opinion that the test of coatings should embrace the system (primer and top coat) rather than single, separate products. He said that the laboratory now has a staff of sixteen men, and he pointed out that the ordnance division and all other branches of the armed service have their own approval agencies.

V. C. Bidlack
Secretary Pro Tem in 1941

Paint Analysis in Crime Detection

The process of examining bits of paint coatings to get evidence in criminal cases was outlined by Walter G. Driscoll, of the Federal Bureau of Investigation. This process is a combination of photomicrography, spectrography, and chemistry. It is applied in such cases as the traces of paint left behind in a hit-and-run automobile accident.

F.B.I. investigators regard hue, shade, and tint of paint as of little importance. They put their efforts chiefly to the identification of color, layer structure, and metal content. Photomicrographs of the strata of a suspected paint are merged with others of a known paint and afford by lantern magnification an excellent means of comparison and a confirmation of identity. Mr. Driscoll showed this with slides.

The spectrograph is used particularly for identifying and comparing the metals present in a suspect paint as pigments. Eastman 33 spectrophotographic plates are used with ultraviolet light and a panchromatic film with infrared. The emission method is used, but equipment is being prepared for absorption methods also. The suspected paint, the layers or coats being separated, is burned in a carbon or graphite arc. Iron spectra are used on the plates as guides in identifying the spectra of metals in the burning paint.

By means of a densitometer it is possible to measure the spectrographic lines so as to get relative quantitative assays of the various metals contained in a paint. These are compared, as are all other data, with those got from paint collected from known sources under suspicion.

Cases related by Mr. Driscoll testified to the actual and forensic value of the evidence got by paint analysis.

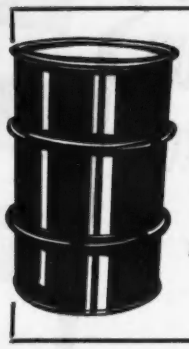
(Summaries of papers presented under F.P.V.P.C. scholarships and student awards will be printed in a later issue.)

Protective Coatings Treatise Published

A comprehensive compilation of the basic data and information pertaining to paint, varnish and lacquer materials has been undertaken by a staff of specialists under the editorship of Joseph J. Mattiello, technical director of the Hilo Varnish Corporation. Volume One of the compilation, which has the title "Protective and Decorative Coatings," was recently published, and reviews the raw materials employed for varnishes and vehicles. It is planned to have three volumes in the entire work.

Designed to serve the needs of the technically trained graduates, and to aid the older and more experienced technologists in the industry, the first volume contains a complete discussion of the drying oils, resins, thinners and solvents, lacquer solvents, natural minerals, and ethers employed in protective coatings. The subsequent volumes will treat the pigments and soaps used in paints, and manufacturing and special studies pertaining to coatings.

Published by John Wiley & Sons, Inc., of this city, the first volume contains 803 pages, 5½ by 9 inches in size, is cloth bound, and sells for $6.



STEEL DRUMS
WE BUY SELL and Recondition
Acme Steel Drum Company
560 Ferry Street
Newark, N. J.

HOW TO PULL MORE PROFIT OUT OF YOUR PAINT

NOT rabbits out of your hat, but *profits* out of your paint! That's the sort of magic you can perform when you treat your paints with

FRITZSCHE BROTHERS' PAINT DEODORANT No. 5

By using this proven deodorant you can give the consumer the type of paint he has been waiting for *and will buy*—namely, one *without objectionable odor*. The cost is negligible—1 lb. of "No. 5" effectively masks 400 gallons of the average paint. Write for particulars TODAY.

FRITZSCHE BROTHERS, Inc.
PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW YORK, N. Y.
BRANCH OFFICES
BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.
FACTORIES AT CLIFTON, N. J. AND BOULOGNE (SEINE) FRANCE

Shawnee DRY COLORS
"Color Content Guaranteed"

Chrome Greens
Chrome Yellows
Toluidine Reds
Para Reds Iron Blues
Cadmium Colors
Lake Colors
Ultramarine Blue
KENTUCKY COLOR & CHEMICAL CO.
Incorporated
General Office and Works
LOUISVILLE, KENTUCKY
Offices and Agents in Principal Cities
Distillers of Coal Tar Products

DEFENSE
AGAINST PRODUCTION DELAYS AND HIGH FILTERING COSTS

SPARKLER FILTERS Cold Cuts as well as Hot Synthethics FASTER —AT LOWER COST

It will pay you to call in a Sparkler engineer to help solve your clarifying problems in today's production emergency.

Sparkler Horizontal-plate Filters are designed to eliminate flow resistance and take full advantage of modern filter aids to give you faster, better filtering than any other unit on the market. They are your best insurance against sediment in containers and against specks—whether on cold cut label varnishes or hot alkyds

Available in capacities up to 10,000 g.p.h. Write today for complete data showing how you can speed up filtering and cut costs.

SPARKLER MANUFACTURING CO.
Dept. D MUNDELEIN, ILLINOIS

GOOD PAINTERS' CAPS are an asset to your business
By supplying your trade with good caps you emphasize your service with added good will.
Let us show you samples and quote on your next order.
Orders accepted for prompt or deferred shipment.
The Minnesota Specialty Co., Inc., 129 North 4th Street MINNEAPOLIS, MINN.
Manufacturers Painters' Caps and other Cloth specialties

7 WAYS SANTOLITE RESINS CAN IMPROVE YOUR SPECIALTY COATINGS

1. HARDER FILMS
2. INCREASED MOISTURE RESISTANCE
3. GOOD LIGHT STABILITY
4. GREATER FLEXIBILITY AND TOUGHNESS
5. IMPROVED WORKABILITY AND INCREASED FLOW
6. LOW VISCOSITY SOLUTIONS
7. COLORLESS LACQUERS

Here are just seven of the many ways the Santolite resins are successfully improving a wide variety of specialty coatings that must meet many types of conditions.

Why not check further on how *you* can realize these advantages in *your* finishes?

You will find much helpful information in the 40-page book, Plasticizers and Resins... and, if you wish, our technical staff will be glad to make a thorough study of your particular needs. Inquire: MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, St. Louis, U.S.A.

CHARACTERISTICS OF SANTOLITES
The Santolites are condensation products of aromatic sulfonamides with formaldehyde.

	MS	MHP	K
Color and form	Soft, pale yellow resin	Hard, brittle nearly colorless resin	Clear, light yellow sticky resin
Flash Point	295° F.	310° F.	400° F.
Specific Gravity at 25° C.	1.355	1.35 (Approx.)	1.307
Refractive Index	1.5705± 0.0015 at 50° C.	1.509± 0.0015 at 30° C. (25% in toluene)	1.5360 ±0.003 at 50° C.
Solubility	Soluble in practically all organic solvents except petroleum hydrocarbons and varnish oils.		
Retentivity* in N/C	Over 100	Over 100	Over 100
Retentivity* in AC/C	Over 100	Over 100	Over 100
Acid Number	Neutral	Neutral	10 Max.

*Retentivity is given in parts per 100 parts by weight of the N/C or AC/C.

LET'S GO! U.S.A. KEEP 'EM FLYING!

MONSANTO CHEMICALS
SERVING INDUSTRY...WHICH SERVES MANKIND

Drugs, Fine Chemicals

Glycerin Price Ceiling Meets Opposition From Some Makers of Soaplye—Halibut Liver Oil Much Higher and Very Scarce—Castor Beans Advanced

Outstanding over everything else in the market for drugs and fine chemicals was the announcement of a price ceiling on all kinds of glycerin, to be effective November 10 and naming prices lower than those prevailing for some time past. Opposition to the soaplye glycerin ceiling formed promptly and meetings of protest have been already arranged to take place this week with the Office of Price Administration in Washington.

The more conservative glycerin men viewed the ceiling as reasonably satisfactory considering the magnitude of the job and the problems besetting a solution.

Alcohol statistics combining operations in July, August and September were released and showed demand running high and substantially ahead of distillery output. Increase in production would seem to be mandatory if consumption continues to rise as it has for months past.

Menthol was scarce with stocks dwindling and no addition to spot stocks of natural material being in sight. Synthetic menthol of U.S.P. description was sold ahead of output and the maker still named no firm prices.

Halibut liver oil was extremely scarce and prices shot up to a new high for the current movement. Codliver oil was firm to strong under excellent demand.

Acetanilide. — Showing strength based on demand and available supplies of raw material.

Acetone.—Output well sold ahead. Little available for open market transactions.

Acetophenetidin. — Demand swells moderately. No surplus supplies. Active season ahead.

Acid, Acetylsalicylic.—Seasonal request shows gain. Very firm market. Output conservative in keeping with raw material position.

Acid, Ascorbic.—Demand excellent.

Antipyrene

The American chemical manufacturer who messed around with phenylhydrazine, acetic ether, methyl alcohol, methyl iodide and caustic soda made antipyrene history in the United States. The chemical reactions were temperamental but he finally tamed them and in 1931 American-made antipyrene poured out in large volume at $2 per pound and broke forever the European control of this market.

Then followed ten years in which the price was as unchanging as the Pyramids. It is still $2 per pound, clearly stamped with the mark of stability.

Far different were the price didoes in 1915 and 1916 of World War No. 1. Prices then were light, buoyant, and as inflammable as hydrogen. And at times stocks were as rare as helium.

From $2.60 per pound in January, 1915, prices rose to climax at the stratospheric level of $60 per pound in February, 1916. The key to the rise was the drop of imports to 222 pounds for all 1915, as against the previously annual importations around 8.000 pounds.

The tariff barrier of 7c. per pound plus 45 percent ad valorem, set in 1922 to protect the infant American coaltar industry, was hurdled by 382,749 pounds of antipyrene that came here from Europe during the ten years from 1920 to 1930.

This was nice business and set the American company to messing around with phenylhydrazine and its temperamental playmates.

Ten years of unchanged prices is evidence of the faith the manufacturer had kept with American buyers despite virtual domination of production.

Price Changes

Advanced

Castor beans, shipment, $2 per long ton.
Halibut liver oil, $10 per gallon.

Reduced

None

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
226.0	226.0	222.9	202.5

Market news that may have developed after this report was sent to press will be found on page 4.

Deliveries reasonably prompt. Consumption gaining steadily.

Acid, Nicotinic. — Call wide and active. Deliveries improve.

Acid, Salicylic. — Shortage quite acute. Deliveries far behind orders.

Acid, Tartaric. — Actively substantial. Stocks limited. Output, actual and potential, well engaged ahead. Manufacturing costs maintained at high levels by raw material prices.

Adeps Lanae.—Very firm. Some tendency upward. Demand excellent.

Alcohol. — Consumption heavy. Needs expected to grow steadily. New production badly needed to supply defense needs. Raw material truly strong. Statistics comparing production, withdrawals, and stocks of pure and denatured ethyl alcohol in July-September of 1941 and 1940, as reported by the Alcohol Tax Unit, Bureau of Internal Revenue, Treasury Department, Washington, are as follows:—

Ethyl Alcohol

	Proof gallons—1941. July-Sept.	Proof gallons—1940. July-Sept.
Production	103,076,707	68,110,566
Withdrawn—		
Tax paid	9,343,858	5,489,186
Tax free	97,145,276	65,949,031
Stocks, Sept. 30	6,491,493	18,482,718

Denatured Alcohol

	Wine gallons—1941. July-Sept.	Wine gallons—1940. July-Sept.
Completely Produced	5,907,504	5,788,837
Removed	5,956,601	5,543,130
Stocks, Sept. 30	390,401	742,332
Specially Produced	41,307,465	29,856,927
Removed	41,442,262	29,298,909
Stocks, Sept. 30	470,952	1,707,217

Bonded Dealers

	Wine gallons—1941. July-Sept.	Wine gallons—1940. July-Sept.
Specially denatured—Received from denaturing plants	1,122,199	922,384
Disposed to bonded manufacturers	1,212,468	1,005,927
Inter-dealer shipments	11,710	11,409
Stocks, Eept. 30	219,279	296,408

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 7

Association meetings:—

N.A.I.D.M. annual meeting, Hote' Roosevelt, New York. Dec. 1 and 2.
Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

CHEMICAL KESSCO PRODUCTS SPECIALTIES

Manufacturers of

TRIACETINE C.P.

ACETINE DIACETINE
TRIACETINE DIBUTYL TARTRATE

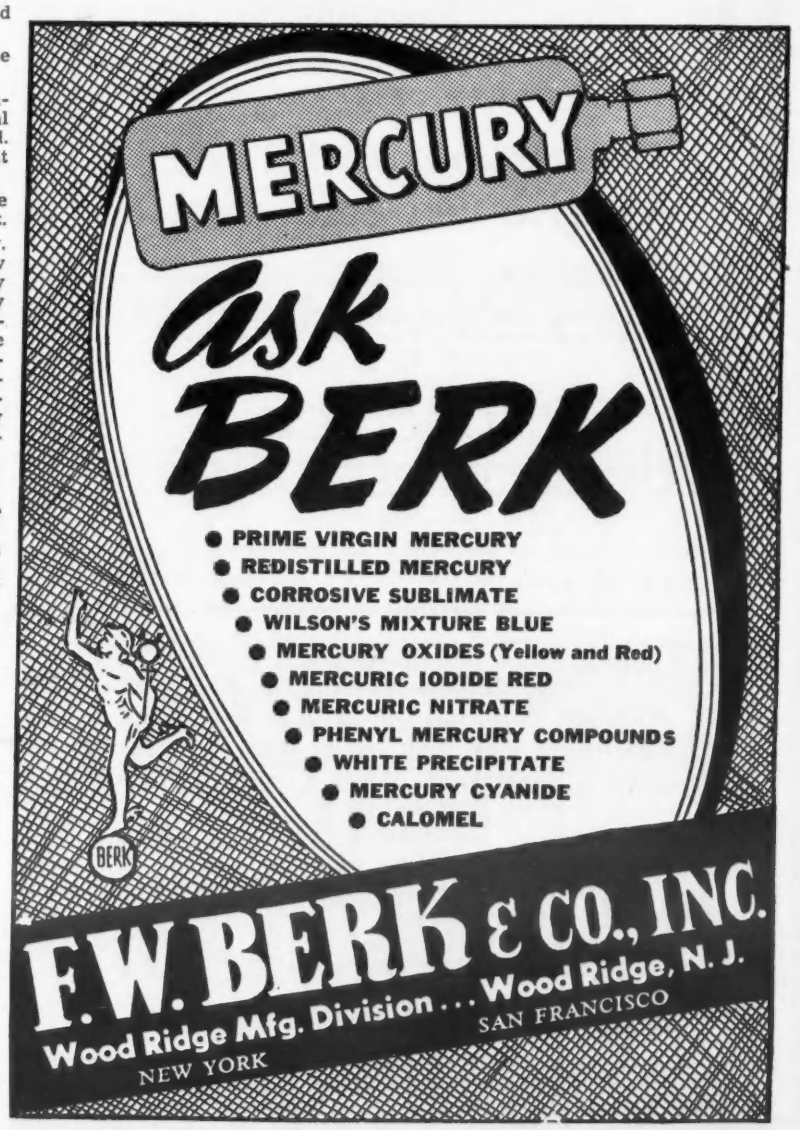
FATTY ACID ESTERS

METHYL — ETHYL — PROPYL — BUTYL — OCTYL — LAURYL — ETC.
STEARATE
CAPRATE
LAURATE
MYRISTATE
OLEATE
PALM
SOYABEAN
LINSEED
RICINOLEATE

Also Esters of other Fatty Acids and Alcohols

For Samples, Specifications or Suggested Formulae Write to

KESSLER CHEMICAL CO., Inc.
Established 1921
DELAWARE AVE. and MIFFLIN ST. PHILADELPHIA, PA.



PROCTER & GAMBLE
Largest Producers and Refiners of
CHEMICALLY PURE GLYCERINE
U.S.P.
Packed in drums and cans
Also other grades—Stocks in principal cities
Gwynne Building, Cincinnati, Ohio
220 East 42nd Street, New York City
C/P

LEGHORN TRADING CO., Inc.
21 West Street Telephone WHitehall 3-9636-7-8 New York City
TARTARIC ACID
CREAM OF TARTAR
PURE IMPORTED EDIBLE OLIVE OILS
OLIVE OIL FOOTS
RED OIL
PALM OIL
RAPESEED OIL
TEASEED OIL
SESAME SEED OIL
Specialists in Finest California Edible Olive Oil

NATIONAL BRAND MILK SUGAR
QUALITY STANDARD THE WORLD OVER SINCE 1883
ALPHA LACTOSE
BETA LACTOSE
POWDERED-GRANULAR
IMPALPABLE
NATIONAL MILK SUGAR COMPANY
Division of The Borden Company
350 MADISON AVENUE NEW YORK, N. Y.

BPC
BENZOL PRODUCTS COMPANY
237 SOUTH STREET, NEWARK, N. J.
MANUFACTURERS OF FINE CHEMICALS
Phenobarbital
Amino Acetic Acid

TRICHLORACETIC ACID U.S.P.
LACTIC ACID
POTASSIUM PERSULPHATE
Mercantile Import & Export Corp.
21 East 40th Street New York, N.Y.

POLYALCOHOLS ATLAS
USE MANNITOL *for* "Special Effects"...
CHEMICALS ATLAS EXPLOSIVES
Example—
ARLACEL*A gives water-in-oil emulsions stable to acid electrolytes.
*Reg. U. S. Pat. Off.
ATLAS POWDER COMPANY
Industrial Chemicals Dept. Wilmington, Delaware

Butyl Alcohol.—Steady, stabilized market. Demand excellent at ceiling prices.

Bismuth Metal and Salts.—Nothing startling to demand. Steady movement at full prices.

Borax.—Demand pressing in high volume. Output pushed hard at the mines. Prices strong.

Brucine. — Orders going unfilled. Keen scarcity prevails for prompt delivery business.

Cadmium. — Consumption reaching new peaks. Producers' output well sold up. Leading makers maintain price stability.

Caffeine.—Reports indicate possibility Brazilian goods coming to this market. Is part of a coffee-plastic project developed there.

Castor Oil.—Demand at excellent volume. Needs showing tendency toward expansion. Raw material definitely on the stronger side. Beans reported bought at $78 per long ton. Ranging to $80.

Chicago, Oct. 22.—Castor oil prices are:—Cold pressed, U.S.P., returnable drums, car lots, 13¼c. per pound; drums, less than car lots, 14c.; tanks, 12⅜c.; No. 3, extracted, returnable drums, car lots, 13c. per pound; drums, less than car lots, 13¾c.; tanks, 12⅛c.

Chloroform. — Sales of technical goods reaching excellent volume. Not plentiful. Raw material problems a factor.

Cocoa Butter.—Quite firm. In good request. Stocks not too plentiful.

Codliver. — Demand maintained finely. Holders maintain reserve. Conserving stocks as much as possible. Season of expanding consumption at hand. In fact, has started.

Ephedrine.—Seasonal demand gains way. Market strengthening some. Prices low and highly favorable.

Fish Liver Oils.—Spot practically bare. Scarcity due mainly to government actual and expressed vitamin needs. Halibut last brought around $70 per gallon.

San Francisco, Oct. 29.—Production in the lower potency vitamin A materials, derived from dogfish, increases. Tension in the 100,000 unit vitamins and in materials in that range is straining under incessant demand on producers. Catch of soupfin sharks yielding high potency oil below that of last year. Demand higher. Quotations lacking.

Formaldehyde. — Resellers offering in 40-pound containers, just under the minimum of 45 pounds governing deliveries at ceiling prices.

Glycerin.—Effective November 10, C. P., dynamite, high gravity, saponification, and soaplye glycerin prices pounds or more. The full schedule appears elsewhere in this issue.

Chicago, Oct. 19.—Glycerin market quiet and steady, pending developments in connection with the price ceiling recently announced. Reported here that both chemically pure and high gravity material will be reduced 2 cents per pound next month by important suppliers. Meanwhile, the prices are unchanged. Ruling prices for both c.p. and high gravity are:—Tankcar, 19¼c. per pound; drums, car lots, 19½c.; drums, less than car lots, 20c.

Iodine and Iodides.—Fair stability prevails. Demand normally active. Reserves of crude in local warehouses believed to protect future needs well.

Magnesia.—Buyers show substantial interest in deliveries following January 1.

Menthol.—Stocks of natural menthol shrinking. No sign of early resumption of major shipments from sources of supply. Technical synthetic item available at $3 per pound. No open quotations on U.S.P. synthetic.

Mercurials.—Very firm. Raw material situation seems tighter. Suggested that OPA will take action on quicksilver ceiling price eventually.

Methanol. — Output absorbed promptly. Consuming industries have insatiable appetite. Ceiling prices working well.

Methylethyl Ketone. — Limited stocks in open market. Producers have no surplus. Well sold up.

Milk Powder.—Unchanged. Advance seemed in making. Demand outruns supply. Department of Agriculture announced purchase, by Surplus Marketing Administration, 970,000 pounds roller skim milk powder, and 40,000 pounds of spray.

Phenobarbital.—Stocks conservative. Demand running to excellent figures. Some trouble with raw material.

Phenolphthalein.—Raw material dif-

SAPONINE
DELIVERIES FROM SPOT STOCKS
JUNGMANN & CO.
INCORPORATED
157 CHAMBERS STREET
TEL. BARCLAY 7-5128-30 NEW YORK CITY

VITAMIN PRODUCTS
FISH LIVER OILS
THE ATLANTIC COAST FISHERIES COMPANY
111 JOHN STREET, NEW YORK, N. Y.

MENTHOL CRYSTALS USP XI
CONSUMERS IMPORT CO., Inc., 342 Madison Ave., NEW YORK
Cable Address: PUREFOOD NEW YORK. All Codes

PLYMOUTH
PLYMOUTH STEARATES
ALUMINUM — ZINC — CALCIUM — MAGNESIUM
Established Qualities Manufactured for thirty years by
M. W. PARSONS, Imports & PLYMOUTH ORGANIC LABORATORIES, Inc.
59 Beekman Street, New York City
DISTRIBUTORS: THOMPSON-HAYWARD CHEMICAL CO., KANSAS CITY, MO., AND BRANCHES

RESORCIN
CATECHOL - META-NITRO-PARA-TOLUIDINE
PENNSYLVANIA COAL PRODUCTS COMPANY
PETROLIA, PENNSYLVANIA

HORMONES PHARMACEUTICALS
VITAMINS
CACODYLATES, BISMUTH AND SODIUM SALTS
HERMAN MEYER DRUG COMPANY, INC.
66-38 Clinton Ave. NEwtown 9-2110 Cable: Sulfanyl Maspeth, N. Y.

governed by Office of Price Administration ceiling announced by Executive Order No. 8734 on October 27. The ceiling prices are below prices recently prevailing. The country was divided into three zones. Prices on Zones A and C were identical and those in for Zone B were 2c. over A and C. They apply to sales of 500 ficulties keeps stocks conservative. Prices very firm.

Podophyllin.—Production cost running high. Market strong. Tendency upward.

Quicksilver.—Stronger. Little on spot. Regular customers supplied at unchanged prices. Some quotations run high as $197 per flask. Future uncertain. Depends on ability of mines to maintain good production during Winter months.

San Francisco, Oct. 29.—Quicksilver continues to advance, slowly but surely. New contract business at $194 per flask, future delivery, reliably reported here. Major sellers strive strongly to keep the market down to $190. Such sellers are reluctant to quote above $190. They confess they have nothing to offer.

Quinine.—Active. Firsthands amply supplied. Supplying all warranted demand.

Silver Nitrate. — The schedule of prices since the last report prevailed as follows, covering quantities of 100 ounces; small lots from 1c. to 2c. more per ounce and quantities of 500 ounces at about 1c. less. Comparison of prices of bullion in New York and London is also provided.

	Per ounce		
		Bullion	
	Nitrate. Cents.	New York. Cents.	London. Pence.
Saturday	24	34⅝	23½
Monday	24	34⅝	23½
Tuesday	24	34⅝	23½
Wednesday	24	34⅝	23½
Thursday	24	34⅝	23½
Friday	24	34⅝	23½

Resale Markets

Activity in the resale market for drugs and fine chemicals developed little that was new last week. From inquiries for sources of supply, it was clear that many smaller buyers continued to pay price premiums, since, to cover their needs, they were forced to purchase goods from holders of resale stocks. Prices showed more stability than they had at times in recent periods. Available supplies seemed unlikely to increase, since buyers on contracts who had viewed their inventories as sufficient to permit diversion of some goods to resale channels were themselves gradually feeling the pinch on supplies.

Quotations noted locally during the period under review were as follows: — Acetone, 15c. to 20c. per pound; acetylsalicylic acid, 80c.; calcium lactate, 31c.; citric acid, 68c.; cream of tartar, 60c.; formaldehyde, 35c. in 40-pound containers; C.P. glycerin, 28c. to 30c.; isopropyl alcohol, 80c. to 90c.; methyl salicylate, 75c.; Rochelle salt, 50c. to 58c.; soluble saccharin, $2.85; salicylic acid, 65c. to 90c.; soda benzoate, 85c.; soda salicylate, 75c.; tartaric acid, 75c.; theobromine, $9.75 to $10.75; theobromine sodiosalicylate, $4.60 to $4.85; cadmium metal, $1.50 to $1.75 per pound.

American Borax Acquires 260-Acre Boron Deposits

Bakersfield, Calif., Oct. 28, 1941

The American Borax Company, headed by John L. Keller, mine operator, and Stephen Hurley, formerly with the Suckow Borax Company, has acquired 260 acres of potential boron properties a half-mile north of the town of Boron, on the Santa Fe railroad, between Barstow and Mojave, and will begin immediate development, seeking the rich kernite deposits believed to underlie the district. Nearby are the mines and mills of Western Borax, Suckow Borax and Pacific Coast Borax companies.

Garfienkel Co. Moves

Garfienkel Chemical Company, importers, exporters and manufacturing chemists, has moved to larger quarters at its present address, 1775 Broadway, this city. The company specializes in revalorization of by-products resulting from the treatment, fractionating and distillation of essential oils, aromatic products and heavy chemicals.

BASIC MATERIALS
for Drugs and Cosmetics

One of the many essential services to the drug and cosmetic industries rendered by the House of McKesson for more than a century is the importing and distributing of basic drug materials from all parts of the world. Improved, perfected and extended, this important service to the industry is now used by scores of manufacturers to help produce drug and cosmetic preparations which satisfy the exacting needs of millions of consumers. Inquiries welcomed.

Agents and Distributors for:

Solvay Sales Corporation
Alkali-Chlorine
Paradichlorobenzene

E. I. Du Pont de Nemours, Inc.
Camphor, USP, XI

Carus Chemical Co.
Benzoic Acid
Soda Benzoate

Brown Company
Chloroform

Hawaiian Pineapple Co.
Citric Acid

Zinsser & Co.
Gallic Acid
Tannic Acid

Stauffer Chemical Co.
Cream Tartar
Tartaric Acid

British Cod Liver Oil Producers
Cod Liver Oil

Heavy Chemical Division
McKESSON & ROBBINS, Inc.
155 E. 44th Street, New York, N. Y.

NICOTINAMIDE
NICOTINIC ACID DIETHYLAMIDE

Acetyl-p-aminophenyl Salicylate

Digitalin (*by French Process*)

High purity grade

TRADE MARK

Manufactured by

LEWISTOWN CORPORATION LABORATORIES

'Phone COlumbus 5-6460
Cable Address "Lewtown"

221 West 57th Street
New York

MILK SUGAR
(LACTOSE)

Produced at Our Gustine, Cal., Plant

Highest Quality

Powdered Impalpable

Best Prices

"When you think of MILK SUGAR, think of S-K-F"

LARGEST INDEPENDENT PRODUCERS

■

SMITH, KLINE & FRENCH LABORATORIES

Philadelphia, Pa.

DRUGS, CHEMICALS

Est. 1910

155 VARICK ST., NEW YORK, N.Y.

CHAS. L. HUISKING & CO., INC.

CHICAGO BRANCH: 561 E. Illinois St.

CABLE ADDRESS: "HUISKING"

OILS, RAW MATERIALS, etc.

IMPORTERS EXPORTERS

DEVOLD COD LIVER OIL

AND OTHER VITAMIN OILS

PEDER DEVOLD'S PURE IMPORTED COD LIVER OILS U. S. P.
Fine medicinal oils available in several guaranteed minimum potencies as, for instance, 1000A/100D, 1250A/150D, 1500A/200D, 2500A/250D (in U. S. P. Vitamin Units per gram).
Considering the present world outlook, prices are inviting.

PEDER DEVOLD'S OLEOVITAMIN A AND D U. S. P.
A particularly fine Cod Liver Oil substitute simulating the best characteristics of the natural product.
(The U. S. P. product must contain 850 to 1100 units of Vitamin A and 85 to 110 units of Vitamin D per gram).

PEDER DEVOLD OIL CO., INC.
155 VARICK STREET, NEW YORK, N. Y.

Cable Address "Vitamine" New York All Standard Codes

Glycerin Prices Ceiled by OPA

—Continued from page 3

pounds each, it is estimated, while more than 15,000,000 pounds will be consumed by the food industry.

About 93 percent of all glycerin produced in the United States is obtained as a by-product of the soap industry and about 80 percent of the total output is made by three large soap companies. The large packing companies, a few of which make soap, are responsible for about 15 percent, while the remaining output comes from a number of smaller producers. The principal producers of crude glycerin are also refiners, while several large chemical companies buy crude glycerin and refine it for use or for sale.

The schedule requires buyers and sellers of glycerin in containers of 500 pounds or more to maintain complete records of all purchases and sales and producers are required to report each four months on the state of their inventories. Monthly affirmations of compliance also are required.

Refined Glycerin*

The following maximum prices on a delivered basis are established for refined glycerin:—

C. P. Glycerin

98 Percent Glycerol

	Per pound.
Tankcars	$0.18½
Drums, carload lots	.18¾
Drums, less than carload lots	.19¼

U.S.P. 95 Percent Glycerol

Tankcars	.18
Drums, carload lots	.18¼
Drums, less than carload lots	.18¾

Dynamite

Tankcars	.18
Drums, carload lots	.18¼
Drums, less than carload lots	.18¾

High Gravity

Tankcars	.18
Drums, carload lots	.18¼
Drums, less than carload lots	.18¾

Yellow Distilled

Tankcars	.18
Drums, carload lots	.18¼
Drums, less than carload lots	.18¾

Crude Glycerin*

The following prices are established for crude glycerin:—

Soap Lye

Basis 80 Percent Glycerol

	Per pound.
Tankcars, delivered	$0.11½
Drums, carloads, delivered	.11½
Drums, less than carloads, delivered	.11½

Saponification

Basis 88 Percent Glycerol to Refiners

Tankcars, delivered	.12¾
Drums, carloads, delivered	.12¾
Drums, less than carloads, delivered	.12¾

Saponification

Basis 88 Percent Glycerol

The following prices are on the basis f.o.b. point of manufacture and are for individual uses:—

	Per pound.
Tankcars	$0.12¾
Drums, carloads	.13¾
Drums, less than carloads	.14¾

Other Glycerol Percentages

Maximum prices of crude glycerin, of glycerol percentages other than those listed above, in tankcars and drums (carload lots and less than carload lots), shall be determined at the rate of 11½ cents per pound delivered for glycerin of 80 percent gylcerol content.

* Zone "A" means:—All points east of and including North Dakota, South Dakota, Nebraska, Kansas, Omaha, Texas; Laramie County, Wyoming; Colorado, east of but not including the following counties:—Jackson, Grand, Gilpin, Jefferson, Douglas, Teller, Fremont, Custer, Huerfano, Costilla.

Zone "B" means:—The territory between Zone A and Zone C, as follows:—Washington, east of and including the following counties: — Okanogan, Chelan, Kittitas, Yakima, Klickitat; Oregon, east of and including the following counties:—Hood River, Wasco, Jefferson, Deschutes, Klamatch; Nevada, Arizona, New Mexico, that part of Colorado west of and including those counties mentioned above; Utah, Wyoming, excepting Laramie County; Idaho, Montana.

Zone "C" means the territory west of Zone "B."

* Prices established for refined glycerin are applicable to deliveries in zones A and C. For deliveries of refined glycerin in zone B, the maximum price shall be the maximum price for deliveries in zones A and C plus 2c. per pound.

William Lee Bean, one of the vice-presidents of McCormick & Co., Baltimore, is at a hospital following a stroke of paralysis suffered while he was on a vacation.

Export Managers to Meet

J. A. Reid, director of the South African Purchasing Commission, and Dr. Albert C. Blau, of the Swiss Consulate, will speak at a luncheon meeting of the Export Managers' Club in the Hotel Pennsylvania November 5.

ALL GRADES OF
REFINED GLYCERINE

U. S. P. B. P.

YELLOW DISTILLED

HIGH GRAVITY

DYNAMITE

★ ★ ★ ★

REFINERIES LOCATED AT

- Brooklyn, N.Y.
- Jeffersonville, Ind.
- Jersey City, N. J.
- Berkeley, Calif.
- Kansas City, Kans.

COLGATE-PALMOLIVE-PEET CO.
GLYCERINE DEPARTMENT
105 HUDSON STREET
JERSEY CITY, NEW JERSEY

PRIVATE FORMULA WORK

Reduce your present manufacturing costs now . .

We can help you offset present rising costs of labor and production by taking over *all* of your manufacturing, packing and shipping work—or any part of them, at a very nominal cost. Ours is a *confidential* business—your formulas are protected in our plant as carefully as in your own. May we explain the nature of our services in detail? An inquiry incurs no obligation of course.

Also Headquarters for Drugs, Chemicals, Essential Oils and Allied Products

R. GESELL, INCORPORATED
formerly Ehrmann-Strauss, Co., Inc.
202 W. Houston Street, New York

Carey PRODUCTS

Carbonate of Magnesia

Oxide of Magnesia

U. S. P. and Technical Grades

THE PHILIP CAREY CO.
Dependable Products Since 1873
LOCKLAND, CINCINNATI, OHIO

Merck & Co. Opens Analytical Laboratories

The new analytical laboratories of Merck & Co., manufacturing chemists, Rahway, N. J., have been opened. The building contains the most modern scientific equipment and facilities for controlling the quality, purity and uniformity of more than 1,500 products used by the professions and industry, many of which are important in the government's programs of public health and national defense.

The Merck analytical laboratories are operated by the control division of the company, which is under the supervision of Dr. Joseph Rosin, vice-president and chemical director. The analytical laboratories are under the direction of Dr. R. R. Foran.

A striking feature is in the design of the chemists' laboratory tables which are in the form of a cross. Each of the four angles is designed to provide a working area for one chemist whose writing desk is within the individual angular area. The opposite ends of each cross are assigned to sinks and compartments for clean glassware and to balance areas for weighing samples.

A fume hood rising from the intersection provides individual access points for each chemist. High-precision analytical balances are located within a few feet of each working area. Each chemist will work in a semiprivate bay with all necessary facilities within or adjacent to his station.

The main operating laboratory is on the third floor, where skylight illumination of the saw-tooth type is supplemented by artificial lighting. Throughout the building, interior lighting has been achieved through the use of fluorescent tubes.

Many special laboratories have been provided. They include those for analytical research, bacteriology, package inspection, micro-analysis, physical apparatus, spectrography and a photographic darkroom; also laboratories equipped for the maintenance of constant temperature and humidity as required.

Coaltar Chemicals

Other Intermediates

—*Continued from page 39*

sure to make all deliveries. Nothing new developed in the prices.

Parachlorophenol.—Consumers made replacements steady to keep the market in a firm position.

Paranisidin.—Active inquiries characterized the market. Prices were without alteration.

Paranitroanilin.—Prices without change and tone firm. Buying steady.

Paranitrophenol.—Firmness was still evident as available supplies were well taken.

Phthalic Anhydride.—Business on allocated basis, with situation displaying some improvement. Prices held firm.

R. Salt.—Dealings remain routine. Prices lacked any change.

Thiocarbanilide.—Market position tight. Demand active. Prices rule firm.

Toluidin.—Shipments moved at a good pace and market retained its strong position.

Xylidin.—Defense needs reflected in a tightening of supplies for other consumers. Prices unchanged and firm.

Coaltar Colors

Inquiries and shipments continued heavy in the market for various coaltar colors last week. The textile industry remained a dominant factor reflecting to a large extent volume of defense business as well as civilian demand for finished products. It was estimated that textile production during the first three quarters of this year was 40 percent above that for the corresponding period a year ago. Wool, cotton and rayon made the most substantial gains. The heavy defense requirements of raw materials was a factor in limiting supplies of some colors. The price situation remained about the same, with the tone firm.

Soft gentle tones of early American pastels featured the 1942 Spring Woolen collection issued by the Textile Color Card Association. These dusty muted shades comprise colonial cream, faded coral, needlepoint blue, antique pink, migonette green, golden buff, old turquois, candlelight yellow, sweet lavender, sampler blue, moss rose and pastel grege.

Resale Markets

Dealings were narrow in the resale market for coaltar chemicals last week. Only a few offerings made their appearance, although inquiries remained fairly active. A wide range continued in phthalic anhydride at 48c. to 60c. per pound. Only scattered offerings of phenol appeared from 37c. to 45c. per pound. Technical salicylic still ranged anywhere from 60c. to 80c. per pound. Benzol, including drums, was quoted at 35c. per gallon. Benzoic acid passed at $1.07 per pound for technical grade and paradichlorobenzene was 14c. per pound.

C. H. Black, vice-president in charge of American Can Company, this city, was elected to its directorate.

CHEMICAL and PHARMACEUTICAL SPECIALTIES

Albumin Tannate U. S. P. Antipyrene Salicylate C. P.
Barbital U. S. P. Barbital Sodium U. S. P.
Benzonaphthol (Betanaphthylbenzoate) N. N. R.
Calcium Lactate U.S.P. Calcium Lactophosphate N.F.
Calcium Levulinate C. P.
Carbromal U. S. P. Chlorbutanol U. S. P.
Cholesterine C. P. M. P. 148-9° C.
Cholic Acid Dehydrocholic Acid
Lactose (Milk Sugar) U. S. P.
Lecithin from Eggs 90-95%
Magnesium Oxide U. S. P. Light
Magnesium Peroxide 25%
Nicotinic Acid Amide Nicotinic Acid Diethylamide
Nucleinic Acid Sodium Nucleinate
Oxyquinoline Base and Salts
Phenetsal N. N. R.
(Acetyl-p-Aminosalol)
Phenobarbital U. S. P. Phenobarbital Sodium U. S. P.
Phenylsemicarbazide
Potassium Glycerophosphate
Quinine-and Sodium Iodobismuthate
Resorcinol U. S. P.
Urethane (Ethyl Carbamate)
Zinc Peroxide 50-60%

AVAILABLE FOR PROMPT DELIVERY

B. L. LEMKE—FINE AND RARE CHEMICALS
248-250 WEST BROADWAY NEW YORK, N. Y.

ISOPROPYL ETHER

NOW AVAILABLE IN TANK CAR QUANTITIES

Selling Agents for
SHELL CHEMICAL CO.

R·W·GREEFF & CO.
10 ROCKEFELLER PLAZA,
NEW YORK CITY

EELSINGH & LUGTIGHEID
Importers & Exporters
GRAND RAPIDS • MICH.
Cable Address: Elco
MANUFACTURER'S AGENTS FOR
* HIGH POTENCY A and D OILS
* SHARK LIVER OIL
* TUNA LIVER OIL
* SARDINE OIL
* FINEST QUALITY, IMPORTED U. S. P. COD LIVER OIL
We Invite Your Correspondence

Low Temperature Carbonisation, Ltd.
ENGLAND

Largest manufacturers in the World of low temperature tar acids of the highest possible degree of purity and efficiency.

A considerable proportion of the output is already being exported to North and South America for disinfectants, germicidal products and plastics, in addition to the special high efficiency flotation grade for the mining industry.

This is the first time in history that highly refined tar acids of this type have been made available on a large scale, and remarkably good results are being obtained by our many American buyers.

Please send us a note of your requirements with full particulars to our Sales Agents:—

TAR RESIDUALS, LTD., "Garthlands," Reigate Heath, SURREY, ENGLAND

WHY PENICK *should be your*

SOURCE OF SUPPLY *for* AMERICAN BOTANICAL DRUGS

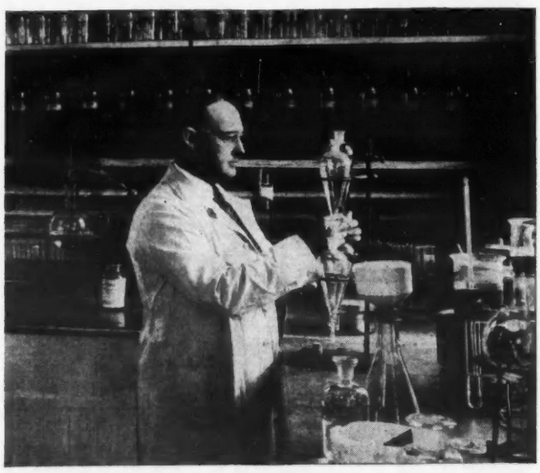
Penick collectors are long experienced in the art of botanical gathering.

Acres and acres of botanicals ready for immediate shipment.

Modern equipment provides extensive production capacity for manufactured products.

Data on American Crude Drugs is assimilated for setting standards of quality.

1. **PENICK'S field organization is the world's largest for supplying all American botanical drugs in commercial use.**
2. **PENICK'S immense volume of stocks, accumulated and supplied each season, means prompt delivery and wide variety of latest crop materials.**
3. **PENICK'S ability to produce any domestic drug for which there is a commercial demand.**
4. **PENICK'S production of Milled Drugs and Extracts from crude materials accumulated from gatherers trained by our own field organization.**
5. **PENICK'S cultivated drugs from its own farm and through experienced growers under contract, supervised by its own field men.**
6. **PENICK'S formulating and supplying of data and recommendations from the proving grounds of production to assist in establishing official standards for American botanical drugs.**
7. **PENICK'S laboratory control of all American botanical drugs from field to manufacturer.**
8. **PENICK'S specialized American Crude Drug Division with its own field production men, including pharmacognosists, botanists, and agronomists for the production of American botanical drugs exclusively.**



Quality and performance of Penick's botanicals are assured by close laboratory control over every step of production.

If you have not already experienced the advantages of using Penick's American botanical drugs why not begin this year? Quotations for 1941 crop materials for prompt shipment or on contract, will be submitted promptly upon request.

S. B. PENICK & COMPANY

50 Church St., New York, N. Y. 735 W. Division St., Chicago, Ill.

THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

Botanical Drugs, Spices, and Gums

Jalap and Buchu Up—Lycopodium Prices Record High—Sharp Decline on Cyprus Anise and Indian Celery—Ipecac Firmer — Licorice from India Noted

Demand continued its recently quiet way throughout the past week without ill effect on botanical drug prices in general. Buyers' requirements were within sellers' ability to supply but it was clear that there was little surplus stock of any article of major importance.

Substantial strength was noted in buchu leaves, jalap root, and lycopodium. The latter item was reported sold at new high record prices and the supply was right at the door of total elimination. Replacement values on buchu and jalap were up.

On the side of declines were numerous items used for condimental and feeding purposes. Particularly severe declines took place in prices on Cyprus anise and Indian celery seeds. Other changes were mainly fractional in character and resulted mainly from locally competitive conditions.

Arabic sorts yielded further in price, the result of recent additions to spot supplies. Great strength resulted from the almost total elimination of stocks of mastic and sandarac, both of which cannot be replaced from firsthand sources of supply.

Balsams

Copaiba.—Demand more active. Volume up. Very firm.

Peru.—Firmer undertones come with wider sales activity.

Barks

Cascara Sagrada.—Excellent demand. Limited spot stocks. Strong price position.

Condurango.—Demand light. Mainly hand-to-mouth. Steady prices.

Cramp.—Best quality bark not too well stocked. Very firm prices.

Sassafras.—Demand gains moderately. Undertones firm.

Coca Leaves

The ink was scarcely dry on the pages of *Ephemeris* when a letter from Europe completely confounded the printed opinion of Dr. E. R. Squibb who had declared his belief that coca leaves were physiologically inert. Dr. Squibb was the most painstaking scientist and manufacturing pharmacist of the 1880's.

The strength and stamina of the coca-eating Peruvian Indians had caused European and American scientists to seek the secret locked within the leaves.

The Squibb experiments confirmed the opinion of the Englishman Dowdeswell. Dr. Squibb described coca as "The economic blunder of the age." He stopped making a fluid extract, substituting extracts made from tea and coffee.

Consumption in the United States had reached the huge total of 40,000,000 pounds of this "valueless" botanical per year when a New York doctor writing from Germany in 1884 informed Squibb of the marvelous local anesthetic properties of coca-derived cocaine just discovered by the Viennese student Koller. Cocaine had been known as early as 1855.

Dr. Squibb confessed his error promptly and proceeded to develop in his laboratory methods of manufacture that are standard practice today.

Consumption of cocaine now requires the yearly importation of between 700,000 and 900,000 pounds of coca leaves. They come mainly from Peru but Java ships here in a limited way.

Price Changes

Advanced

Buchu leaves, 2c. per lb.
Cassia buds, ½c. per lb.
China, extra select, broken, ½c. per lb.
Clove, Zanzibar, ¼c. per lb.
Hempseed, ½c. per lb.
Jalap root, 3c. per lb.
Lycopodium, $1 per lb.
Marjoram, Chilean, 3c. per lb.
Pepper, black, Lampong, ½c. per lb.
Sage, Greek, 10c. per lb.

Reduced

Arabic gum, 2c. per lb.
Anise, Cyprus, 2c. per lb.
Canary seed, Argentina, ⅛c. per lb.
Celery seed, Indian, 4c. per lb.
Cumin seed, Cyprus, ¼c. per lb.
Persian, ½c. per lb.
Dill seed, ¼c. per lb.
Mustard seed, Washington yellow, ¼c. per lb.
Pepper, white, Java, Muntok, ½c. per lb.
Singapore Muntok, ¼c. per lb.
Pimento, ½c. per lb.
Sage, Cyprus, 6c. per lb.

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
313.1	305.1	288.4	207.2

Market news that may have developed after this report was sent to press will be found on page 4.

Beans

Calabar.—Activity routine. Prices firm.

Vanilla.—Much depends on safe arrival of ship now afloat from Madagascar to New York. Bourbon beans aboard badly needed. Current market firm.

Berries

Fish.—Plenty available to meet current light demand.

Juniper.—New Hampshire berries reported finding excellent favor with buyers.

Imports and Detentions

Entries of botanicals at the port of New York since the week of January 1, 1941, and the detention of these items by the Food and Drug Administration because of the presence of matter rendering them unfit for human consumption were:—

	Bags Detained.	Bags Entered.
Anise	190	3,243
Belladonna	70	207
Caraway	73	207
Cardamom (cases)	10	2,249
Celery	69	2,476
Coriander	16,396	32,043
Cumin	4,289	14,063
Digitalis leaves (cases)	...	...
Dill	4,318	17,784
Fennel	210	2,274
Henbane leaves (bales)	216	256
Mustard	...	10,017
Poppy	1,080	3,633
Sage leaves (bales)	1,558	9,240
Sesame	3,461	8,960
Stramonium	6	248
Thyme	1,584	4,242

Current prices on botanical drugs and spices are given in the alphabetical list of prices beginning on page 7

Association meetings:—

Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

CHECK THIS LIST

OF HOPKINS' PROFESSIONALLY MILLED, ANALYZED, HIGH STANDARD

CRUDE DRUGS

The earth contributes and J. T. Hopkins & Company distributes every foreign and domestic botanical drug for which there is a commercial demand. A few of the many botanical drugs, ready for prompt or contract shipment from our New York City warehouses and mills, follow:

✓ALOES
✓ALTHEA ROOT
✓ANISEED
✓ARECA NUTS
✓ASAFOETIDA GUM
✓BENZOIN GUM
✓BUCHU LEAVES
✓CALAMUS ROOT
✓CUDBEAR
✓CINCHONA BARK
✓COCILLANA
✓DAMIANA Select
✓DERRIS
✓DIGITALIS (116% Active)
✓DOGGRASS CUT
✓ERGOT (140% Active)
✓EUPHORBIA PIL.
✓FENNEL SEED
✓GALANGAL ROOT
✓GINGER
✓GUAIAC GUM Glassy
✓HAWTHORNE BERRIES
✓HOREHOUND
✓INSECT FLOWERS
✓IPECAC ROOT
✓IRISH MOSS
✓KOLA NUTS
✓MYRRH GUM
✓OLIBANUM GUM
✓ORANGE PEEL
✓ORRIS ROOT
✓PAPAIN
✓PEPPERMINT
✓PSYLLIUM SEED
✓QUASSIA
✓QUINCE SEED
✓RHUBARB ROOT
✓SARSAPARILLA
✓SENEGA ROOT
✓SENNA LEAVES
✓SQUILLS
✓STRAMONIUM
✓UVA URSI
✓WILD CHERRY BARK
✓PALE ROSE BUDS

◆ ◆ ◆ ◆ QUOTATIONS AND SAMPLES ON REQUEST ◆ ◆ ◆ ◆

J. L. HOPKINS & CO.

IMPORTERS, MILLERS AND MANUFACTURERS OF PROFESSIONALLY MILLED, ANALYZED CRUDE DRUGS

Boston
Philadelphia
220 BROADWAY, NEW YORK CITY
San Francisco
Memphis
Los Angeles

We Offer the Following From Stock

AGAR AGAR, Japanese Shreds, Cut and Powder
ALOES, Curaco and Cape
ALTHEA ROOT
ANISE SEED, Bulgarian
BALSAM COPAIBA
BALSAM PERU
BALSAM TOLU
BELLADONNA Leaves and Root
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CANARY SEED, Moroccan 2%
CELERY SEED
CLOVES, Zanzibar
COCILLANA BARK
CORIANDER OIL AND SEED
CUMIN SEED
DANDELION ROOT
FENNEL SEED, Indian
FOENUGREEK SEED
GENTIAN ROOT
GINGER, Jamaica
GRAINS OF PARADISE
GUM ARABIC AMBER SORTS
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES
LAUREL LEAVES
LAVENDER FLOWERS
MAHUANG, Chinese
MALEFERN ROOT
MARJORAM LEAVES
OAK MOSS
PEPPERMINT OIL
PIMENTO, Jamaica
PSYLLIUM SEED AND HUSKS
QUINCE SEED
RHUBARB ROOT
ROSEMARY LEAVES
SAGE LEAVES
SARSAPARILLA ROOT
SAVIN OIL
SAVORY
SENNA LEAVES AND PODS
SESAME SEED HULLED
SQUILL ROOT
STRAMONIUM LEAVES
STROPHANTUS SEED
THYME LEAVES
UVA URSA LEAVES
VALERIAN ROOT

AMINOPHYLLINE
BARBITAL
COD LIVER OIL, Medicinal and Poultry Grades
CARBOLIC ACID CRYSTALS
EPHEDRINE SALTS
GUM CAMPHOR, Japanese
ICHTHAMMOL, N.F.
MENTHOL, Japanese
MILK SUGAR
STRYCHNINE SULFATE
VITAMIN PRODUCTS
WAX, JAPAN

• Other Imports Arriving Daily. • We Offer a Complete Line of Pharmaceutical Pills, Tablets, Liquids and Ointments.
• All Orders and Inquiries Given Immediate Attention.

KACHURIN DRUG COMPANY

Manufacturers - Importers - Exporters - Distributors

DRUGS - CHEMICALS - OILS - BOTANICALS

525 West 43rd Street, New York, N. Y.

Telephone: BRyant 9-7400-1-2-3-4-7456
Cable Address: Kachurin, New York
Codes: A. B. C. 5th & 6th Edition and Bentley's

Flowers

Arnica.—Purely nominal article now. Exportable only after filing of affidavit telling Economic Defense Board specific uses to which it is to be put.

Chamomile.—Fair reserves available. Very firm prices.

Pyrethrum.—Easy and competitive in whole and concentrate forms.

Saffron.—Little doing. Moderate stocks firmly priced.

Gums

Arabic.—Sorts down to 19c. to 20c. per pound. Recent arrivals created fair holding of unsold gum. More competitive situation.

Asafetida.—Arrivals slow from India. Keeps prices on firm side. Import costs high.

Mastic.—Due to disappear entirely. No replacement believed possible. Last sales at $2.85 per pound.

Sandarac.—Stocks dwindle. Cannot be replaced. Sold last at 92c. per pound.

Herbs and Leaves

Buchu.—Higher and firmer at 72c. to 73c. per pound. Replacement arrivals slow and uncertain.

Damiana.—Reasonably easy in undertone.

Henna.—In good reserve. Prices steady.

Marjoram.—Chilean up sharply to 18c. to 18½c. per pound.

Sage.—Greek advanced to $1.25 to $1.30 per pound. Spanish cheaper at 39c. to 40c. Cyprus material excellent in quality.

Miscellaneous

Areca Nuts.—Considerable local competition. Prices unsettled.

Ergot.—Undertones reasonably easy for the moment.—Continued arrivals from Portugal likely to keep current situation in force.

Lycopodium.—Scarce almost to the point of total unavailability. Sales reported made at $8.50 per pound.

Papain.—No further decline. Still competitive.

Roots

Goldenseal.—Firm held in all markets.

Ipecac.—Prices show strengthening tendency on spot.

Jalap.—Whole at 40c. to 51c. per pound, and powder at 45c. to 58c., as to strength, indicates stronger position locally.

Orris.—None known to be definitely available. Total would be very small at the best. Nothing obtainable from Italy. North African ports ship occasionally.

Seeds

Anise.—Cyprus seed lower at 38c. to 39c. per pound. No Bulgarian offered.

Canary.—Argentine seed down to 3.60c. to 3.85c. per pound.

Celery.—Lower import cost sends India seed down to 50c. to 51c. per pound, spot.

Cumin.—Cyprus lower at 18¼c. to 18¾c. per pound. Persian, down to 17½c. to 18c.

Dill.—Shaded to 8¼c. to 8¾c. per pound.

Fennel.—Argentine seed much cheaper at 13c. to 13½c. per pound.

Hemp.—Higher at 9½c. to 10c. per pound.

Poppy.—India white seed fractionally lower at 9c. to 9½c. per pound.

Spices

Cassia.—China buds up to 18c. to 18½c. per pound. Extra select broken China cassia higher at 16c. to 16½c.

Clove.—Zanzibar goods up to 15½c. to 16c. per pound.

Ginger.—All varieties show great strength.

Peppers.—Black Lampong up to 6c. to 6¼c. per pound. White Java Muntok shaded to 9½c. to 10c.; Singapore Muntok, 9¼c. to 9¾c.; small berry Muntok, 8¾c. to 9¼c. Red peppers firm.

Trading in black pepper futures on the New York Produce Exchange from October 25 to October 31, inclusive, comprised 77 contracts. Following is a price record for the week:—

	Cents per pound—		
	High.	Low.	Close.
March	6.05	5.90	5.98@6.00
May	6.04	5.99	6.00@6.09
July	6.19	6.09	6.15@6.18
December	5.93	5.76	5.88@5.89

Pimento.—Jamaica goods shaded on spot to 19½c. to 20c. per pound. Sellers might do 19c. No change in Mexican spice.

Washington Talks It Over

—*Continued from page 5*

port prices against domestic, and where the difference is more than enough to cover additional costs, OPA, Commerce Department and trade circles may be consulted. The expectation is that many export licenses will be denied in such cases. This procedure will also serve to eliminate fly-by-night exporters, who, one way or another, have been able to get export licenses where established competitors have failed.

When Is a Label Not a Label

FDA ardently hopes the Solicitor General will appeal two recent decisions of Federal district courts upsetting its interpretation of the food, drug, and cosmetic act. In both cases manufacturers shipped drug products interstate and sent dealers separate packages of literature to be passed out to retail buyers. It was admitted all around that if the language of the leaflets had been on the labels the products would have been misbranded.

FDA pointed to several sections of the act, particularly 201 (m) and 301 (k), to support its contention that later "association" of product and leaflet was just as much mislabeling as though they had been shipped together.

Two judges thought differently; one in Wisconsin regarding a product called "Catalyn," and one in Washington regarding a product called "Nue-Ovo." Two issues may be involved if and when the cases are appealed—how far the interstate commerce powers of the Federal government can pursue a product inside a State, and whether the literature constitutes "advertising," which is exclusively within the jurisdiction of the Federal Trade Commission.

Antifreeze

The threatened shortage of antifreeze for the winter of 1942-43, because most antifreeze materials are going into munitions manufacture, has generated a number of proposals for changing price ceilings and denaturing formulas for alcohol. A number of denaturing materials are themselves likely to be scarce, though their consumption is a fraction of the volume of alcohol put into radiators, and both the denaturers and the government want to be prepared to shift from one material to another. Suggestions have been made to the tax authorities, and discussions are proceeding, and it is not unlikely that some alternative formulas may be approved before the manufacturing season is far advanced. Changes now would hardly affect this Winter's supply, since most of that is already in dealers' hands or drummed up to ship to them.

Trade Briefs

Fertilizer needs of the French West Indies for 1942 will approximate 30,900 tons, with an estimated value of $1,402,000, an amount double the imports of 1941.

Purepac Corporation, pharmaceutical suppliers, has purchased 40,000 square feet of grounds and buildings, valued at $1,000,000, at 503-519 East Seventy-second street and 504-514 East Seventy-third street, this city.

ПРОДАНО Р. ПРЕНТИССУ

(RUSSIAN FOR "SOLD TO R. J. PRENTISS")

Wherever Botanical Drugs are offered for sale, the words "Sold to R. J. Prentiss" are frequently uttered by the seller, spoken in Chinese, Arabic, Russian or whatever language is used in that market. Through the unceasing efforts of our field staff the quantities of hard-to-get commodities are exceeding our most optimistic expectations. But with the continued dark outlook abroad, it will undoubtedly become increasingly difficult to obtain certain Botanical Drugs, and we advise our customers, old and new, to call us now concerning supplies needed for fall and winter.

THE WORLD IN BOTANICALS — R. J. PRENTISS & CO., INC.

R. J. PRENTISS & CO.

80 JOHN STREET, NEW YORK CITY

MORTEZA KHOSROVSCHAHI

General Exporter and Importer of Raw Materials from the Near East and Orient

Specializing in Gum Tragacanth

165 BROADWAY WOrth 2-2473,-2474 NEW YORK, N.Y.

WHOLE AND POWDERED

GUMS

FRANK-VLIET CO., Inc.

160 WATER ST. NEW YORK, N. Y.

BRANCH OFFICES

1001 Chestnut St. Philadelphia, Pa.
912 East Third St. Los Angeles, Cal.
389 St. Paul St., W. Montreal, Canada
206 State St. Boston, Mass.
383 Brannan St. San Francisco, Cal.

KARAYA (INDIAN) GUM
LOCUST BEAN
TRAGACANTH
ARABIC

Exchange

OIL of LEMON

CALIFORNIA COLDPRESSED

Because of its true-to-the-fruit flavor and unvarying strength; because of its natural appeal to American tastes; and because of its sparkling clarity and excellent solubility, "EXCHANGE" Brand OIL OF LEMON is a good "buy" at any price. By using this dependable product of America's greatest cooperative, you can assure *your* product a quality of appeal that means just two things: More sales and more profit.

FRITZSCHE BROTHERS, Inc.

PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW YORK, N. Y.

BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.

Essential Oils, Aromatic Chemicals

South American Oils Gain Importance Here—Lemon, Orange and Sassafras Offered — Distilled Lime Scarce and Higher—Cassia Up — Peppermint Advanced

Prices for essential oils continued their upward course last week. Movements as a whole have been one directional for so long as to make advances in quotations mostly a commonplace. Lack of sufficient stocks also kept aromatic chemicals straining toward higher price levels and there seemed little chance that stocks would improve sufficiently to turn values in buyers' favor at an early date.

Leading the van to new highs in values were distilled lime, ginger, cassia, pineneedle, rosemary, sweet birch, and bay oils. Great scarcity was the rule in most oils originating in the Far East and in numerous quarters all quotations on such materials were nominal.

South America's importance as a new primary market for numerous oils was evidenced by the spot offering of a fine quality lemon oil from Uruguay, good orange oil from Brazil and Argentina, and a variety of sassafras oil from Uruguay that is suitable for aromatic South American oils are expected chemical manufacture. Other gradually to reach this market.

Essential Oils

Almond.—Small stocks strongly held. Demand steady.

Anise.—Some tendency to shade. Outlook more favorable for continued arrival of replacements.

Bay.—Higher. More active. Market $1.25 to $1.50 per pound. Stocks fair. Replacement up.

Bois de Rose.—No weakness. Strongly held at source. No spot stock surplus.

Cananga.—Small stocks become more valuable. Replacement slow and uncertain as to arrival.

Caraway.—Little demand or supply. High cost curbs consumer interest.

Cassia.—Higher at $7.25 to $7.50 per pound. Increasingly hard to get goods from source to spot. Some talk of total stoppage of movement noted.

Price Changes

Advanced

Bay, 25c. per lb.
Cassia, 25c. per lb.
Ginger, 50c. per lb.
Lime, distilled, 25c. per lb.
Peppermint, 15c. per lb.
Pineneedle, 10c. per lb.
Rosemary, 25c. per lb.
Sweet birch, 50c. per lb.

Reduced

None

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
228.8	227.8	227.0	149.7

Market news that may have developed after this report was sent to press will be found on page 4.

Vanillin

It's made from eugenol—offspring of clove oil—and also from guaiacol, and from lignin found in the waste sulphite liquors, byproduct of paper manufacture.

Total domestic production is not positive since your Uncle Sam's Bureau of the Census confines production figures to the output of guaiacol vanillin—which was 608,614 pounds in 1939 and 576,708 pounds in 1940.

Tariff Commission studies in 1920 and 1921 gave domestic production as 134,700 pounds in 1919, against 120,619 pounds in 1914. The 1919 vanillin was made in the United States only from eugenol. The guaiacol process originated in Europe.

The modern vanillin era began in 1926 when prices were changed from an ounce to pound basis—$7.20 per pound. Then came the importation of European guaiacol vanillin, followed by its manufacture here to sell at $6 per pound in competition with eugenol vanillin at $6.25.

Competition drove prices down and when the new lignin vanillin was offered in late 1938, it was priced at $2.10 per pound, identical with guaiacol vanillin and below eugenol vanillin at $2.20.

Demand that presses beyond the ability of producers to supply ~~finds~~ prices but little above their all time low. Two varieties sell actually lower than when World War No. 2 began in 1939. Guaiacol and lignin vanillin are $2.35 per pound now, against $2.50 then. Eugenol vanillin is $2.60 now, as then.

Cedarleaf. — Reasonably active. Showing considerable strength.

Cinnamon.—Firm to strong, spot and source. Stocks moderate.

Citronella.—Slightly more local competition. No change in open quotations.

Clove.—Undertones strengthen constantly. Excellent demand. Production well sold ahead.

Dill.—Slower market. No easing of prices.

Eucalyptus.—All requirements likely to be filled. Prices strong, spot and Australia.

Geranium.—No weakness. Not much activity. Stocks small.

Ginger.—Higher at $16 to $20 per pound. Not much available at inside figure. Tendency upward.

Hemlock.—Good demand strengthens prices.

Lemon.—Oil from Uruguay finding increasing favor. Local stock moderate. Expected to increase. Quality accounts for comparatively high prices.

Lemongrass.—Slightly easier without prices being affected.

Lime.—Distilled oil getting very scarce. Market up to $8.25 to $8.50 per pound. Only nominal stocks of expressed oil noted.

Peppermint.—Firmer at slight advance. Natural, $3.75 to $4 per pound; redistilled, $4 to $4.25.

Rosemary.—Higher at $1.20 to $1.30 per pound. Fair spot stocks available.

Sweet Birch.—Better demand. Higher in country. Up on spot to $3 to $4 per pound for northern and $2.25 to $2.50 for Southern oil.

Aromatic Chemicals

Anethol.—Steady. In good request. Orders averaging larger than usual.

Anisic Aldehyde. — Considerable price stability noted. Fair call.

Benzaldehyde.—In short supply. Impossible to increase output.

Benzyl Acetate.—Scarce. Strong. Little for prompt delivery.

Benzyl Alcohol.—Output far behind needs. Virtually nominal.

Current prices on essential oils and aromatic chemicals are given in the alphabetical list of prices beginning on page 7

Association meetings:—

Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

M&R
An MM&R ECONOMY POINTER
Review Your Stocks of
BALSAMS
Purchase at this time, in our opinion, would be advantageous. Particular attention is called to—
BALSAM PERU
(Pure True Genuine San Salvador MM&R)
BALSAM COPAIBA
MAGNUS, MABEE & REYNARD, INC.
Essential Oils, Balsams, Aromatic Chemicals, Concentrated Flavors .. Since 1889
16 DESBROSSES STREET, NEW YORK, N.Y.
CHICAGO: 221 North La Salle Street
CANADA: Richardson Agencies, Ltd., 454 King St., W., Toronto

MYSORE GOVERNMENT SANDALWOOD OIL

Distilled at Linden, N. J. from selected Mysore Heartwood by Sole Distillers and Selling Agents

W. J. BUSH & CO.
INCORPORATED

ESSENTIAL OILS | NATURAL FLORAL PRODUCTS | AROMATIC CHEMICALS

D. W. HUTCHINSON & CO., Inc.

IMPORT ESSENTIAL OILS EXPORT

162-164 Front Street Established 1896 New York City

APRICOT KERNEL ALMOND COSMETIC OILS AVOCADO GRAPESEED

Sold through dealers. Convenient 25 pound packs.

THE HOUSE OF WALLACE

1300 WEST 8th ST., LOS ANGELES, CALIFORNIA Cable: Wallace Los Angeles

BENZALDEHYDE
N. F.
MANUFACTURED BY
VAN SCHAACK CHEMICAL WORKS, INC.
3430 Henderson Street Chicago
Eastern Representative: Robert & Co., 25 Broad St., New York

We solicit your inquiries on

D&O ESTABLISHED IN 1798

BALSAM TOLU
BALSAM PERU
BALSAM COPAIBA
OIL PEPPERMINT
OIL CLOVE, U. S. P.
OIL SANDALWOOD, U. S. P.

DODGE & OLCOTT COMPANY
180 VARICK STREET NEW YORK, N. Y.
Boston Chicago Philadelphia St. Louis Los Angeles
Plant and Laboratories: Bayonne, N. J.

Benzyl Benzoate.—Producers pressed to meet back orders. Plant output conservative.

Benzyl Cinnamate. — Deliveries made only on orders of long standing. Nothing available for prompt shipment on new business.

Benzyl Formate.—Limited supplies. Many without stocks.

Benzyl Isoeugenol.—Could scarcely be stronger. Deliveries on hand-to-mouth basis.

Benzyl Propionate. — Consumers press producers vainly for quick deliveries against new orders.

Benzyl Salicylate.—Raw material shortage keeps producers far behind in deliveries.

Cinnamic Alcohol.—Market virtually bare of stock to meet substantial demand.

Ethyl Vanillin.—Excellent demand. Deliveries conservative.

Geraniol.—Limited stocks closely held. Some dealers bare of supplies.

Linalyl Acetate.—Strong. Scarce. In high demand.

Methyl Salicylate.—Resales commanding price premium over producers' schedule. Excellent demand.

Phenylethyl Acetate.—Demand gains. Stocks shrink. Prices tend upward.

Phenylethylphenyl Acetate.—Small stocks in strong hands. No surplus in sight. Demand active.

Safrol.—Odd lots command high prices. No regular supplies available.

Strolyl Acetate.—Sellers reserved. Lack normal reserves. Demand runs ahead of supply.

Thymol.—Stocks insignificant. Cannot be increased much. Sales mainly in small lots. Prices strong.

Vanillin.—Strong and active. Plants' output finding buyers readily. Market reasonably stable now.

STANDARD
Collapsible **TUBES**
and CAN SPOUTS

STANDARD Tubes have never been excelled in toughness and strength, freedom from defects, accuracy and attractive decoration. For forty years, Standard have pioneered in many phases of Tube making, and are today America's foremost specialists in the design and manufacture of openings, necks and special devices for most convenient application of products sold in tubes or small cans. If you make a product which can be merchandized in tubes or small cans, consult us and we will furnish free samples, prices and suggestions without obligation on your part.

FREE CATALOG: Full of useful data on Tubes of every description, from the smallest to the largest—One Quart; "Shells" or single-dose Tubes; Tube Openings, Caps, Necks and Applicator Devices. Wax Lining; Tin Coating; etc. Send for it.

STANDARD SPECIALTY and TUBE CO., 18th Street New Brighton, Pa.

Lewistown Corp. Formed To Make Pharmaceuticals

A new corporation, the Lewistown Corporation Laboratories, has opened its experimental laboratories and executive offices at 221 West Fifty-seventh street, this city. The corporation's manufacturing plant occupies the tenth floor at 39-43 West Sixtieth street, this city. The corporation specializes in many pharmaceutical products, such as nicotinamide, nicotinic acid diethylamide, salophene, and digitalin, from the French process.

Dr. Stephan Klinghoffer, technical and scientific adviser of a newly organized South American chemical company, made the trip from Buenos Aires to supervise the installation of the equipment for the Lewistown organization.

Illinois Trademark Law Now Requires Special Filing

Illinois trademark law has been amended so that the holders of trademarks registered in that State must file a report on a special form every eight years. The first form which is furnished by the Secretary of State of Illinois must be filed not later than January 1, 1942. It must be executed under oath and mailed to Springfield, Ill., prior to this date, together with a check for $1 covering filing fee charged.

Quaker Corp. Expands Plant

The Quaker Chemical Products Corporation, Conshohocken, Pa., is building a two-story unit at its plant, measuring 40,000 square feet. This is in addition to the recent series of buildings which increased manufacturing and storage facilities by 16,000 square feet.

Swiss Chemical Society finally, in August, was able to present in London, England, for the first time its medal in honor of Theophiastus Paracelsus, which was awarded in the summer of 1939, to Sir Robert Robinson, British research chemist.

OIL LEMON SPECIAL
URUGUAY
"... the finest Oil of Lemon I have ever received."
(Remarks from a customer)
BUSH PAN-AMERICA, LTD.
136 LIBERTY STREET, NEW YORK CABLE: ARROBUSH

Detailed information gladly supplied

ORBIS
PRODUCTS CORPORATION
215 PEARL ST., NEW YORK

What You Can Use

Guide to Materials That Are Suitable for Various Purposes in Chemical Converting, Compounding, and Processing Industries

Fully protected by Copyright

Three-hundred-ninety-eighth instalment

Printing Inks

Antioxidants Used in Printing Inks

(*Continued from October 27 issue*)

Condensation products of dihydrocarvone with (continued)—
(5) Aminodiphenylamine
(6) Anisidin
(7) Aralkylamines
(8) Arylamines
(9) Benzidin
(10) Benzylamine
(11) Para-aminodimethylanilin
(12) Para-aminophenol
(13) Para-p'-diaminodiphenylmethane
(14) Paraphenetidin
(15) Paraphenylenediamine
(16) Phenylbydrazin
(17) Toluidin
(18) Xylidin

Condensation products of fenchone with—
(1) Amines
(2) Aminocarbazole
(3) Aminodiphenyl
(4) Aminodiphenyl oxide
(5) Aminodiphenylamine
(6) Anisidin
(7) Aralkylamines
(8) Arylamines
(9) Benzidin
(10) Benzylamine
(11) Para-aminodimethylanilin
(12) Para-aminophenol
(13) Para-p'-diaminodiphenylmethane
(14) Paraphenetidin
(15) Paraphenylenediamine
(16) Phenylbydrazin
(17) Toluidin
(18) Xylidin

Condensation products of pulegone with—
(1) Amines
(2) Aminocarbazole
(3) Aminodiphenyl
(4) Aminodiphenyl oxide
(5) Aminodiphenylamine
(6) Anisidin
(7) Aralkylamines
(8) Arylamines
(9) Benzidin
(10) Benzylamine
(11) Para-aminodimethylanilin
(12) Para-aminophenol
(13) Para-p'-diaminodiphenylmethane
(14) Paraphenetidin
(15) Paraphenylenediamine
(16) Phenylbydrazin
(17) Toluidin
(18) Xylidin

Condensation products of terpene ketones with—
(1) Amines
(2) Aminocarbazole
(3) Aminodiphenyl
(4) Aminodiphenyl oxide
(5) Aminodiphenylamine
(6) Anisidin
(7) Aralkylamines
(8) Arylamines
(9) Benzidin
(10) Benzylamine
(11) Para-aminodimethylanilin
(12) Para-aminophenol
(13) Para-p'-diaminodiphenylmethane

Condensation products of terpene ketones with—
(14) Paraphenetidin
(15) Paraphenylenediamine
(16) Phenylbydrazin
(17) Toluidin
(18) Xylidin

Cresylphenyl-cadmium
Cresylphenyl-mercury
Cresylphenyl-stibine
Cresylphenyl-thallium
Cresylphenyl-zinc
Cresylphenyl-zinc sulphide
Crotyloxydiphenylamine
2:2-Cyclopentamethylene-6-methyl-2:3-dihydroperimidin
Diacetylethylenediamine
Diallyloxydinaphthylamine
2:4-Diamino-4'-allyloxydiphenylamine
Diaryl thioether
Dibenzylparaphenylenediamine
Dibetanaphthol thioether
Dibetanaphthyldecahydronaphthylamine
Dibutylbenzidin
Dichlororetene
Dicresol thioether
Dihydroquinolins
Dihydroaxyanisole
4:4'-Dihydroxydiphenyl thioether
2:2'-Dihydroxy-(5:5'-diteritary-butyl) diphenylthioether
1:2-Dihydroxynaphthalene
1:4-Dihydroxynaphthalene
1:5-Dihydroxynaphthalene
1:7-Dihydroxynaphthalene
2:3-Dihydroxynaphthalene
2:4-Dimethyl-4'-allyloxydiphenylamine
4-Dimethylamine-4'-cinnamyloxydiphenylamine, cis and trans
Dimethylanilin
2:2-Dimethyl-2:3-dihydroperimidin
2:4-Dimethylphenylarsin oxide
Dinaphthylene dioxide
Dinaphthylene oxide
Dinitroresorcinol
Dipara-allyloxydiphenylamine
Dipentene
Diphenols
Diphenylamine
4-Diphenylamino-4'-allyloxyldiphenylamine
Diphenylchloroarsin
Diphenylmethyl-aluminum
Diphenylmethyl-bismuthine
Diphenylmethyl-cadmium
Diphenylmethyl-mercury
Diphenylmethyl-stibine
Diphenylmethyl-thallium
Diphenylmethyl-zinc
Ditolyl-mercury
Ditolyl-mercuryl sulphide
4-Ethyl-4'-allylovydiphenylamine
Ethylalphanaphthylcarbamyldimethyl dithiocarbamate
Ethylalphanaphthylcarbamylpentamethylene dithiocarbamate
Ethylbenzoylhydroquinone
Ethylbenzoylphoroglucinol
6:7-Ethylene-2:3-dihydroperimidin
Ethylorthotolylcarbamyldimethyl dithiocarbamate
Ethylorthotolylcarbamylpentamethylene dithiocarbmate
Ethyloxyphenylparabutylamine
Formylphenylhydrazin
Guaiacol
Heptylhydroquinone
Heptylphloroglucinol
Heptylgyrogallol
Heptylresorcinol
Hexylresorcinol
Hydroquinone
4 Hydroxy-2-ethyl-2-methyl-2:3-dihydroperimidin
Hydroxymethylanethol
4-Isocrotoxydi-1-naphthylamine
4-Isopropenyl-4'-allyloxydiphenylamine
Magnesium salts of—
(1) Aminophenols, primary, secondary, and tertiary
(2) Metamethylaminophenol
(3) Orthoaminophenols
(4) Para-aminophenols
(5) Para-anilinophenol
(6) Paradimethylaminophenol
(7) Parahydroxydiphenylamine
(8) Parahydroxyphenylbetanaphthylamine
(9) Parahydroxy-N-phenylglycin
(10) Parahydroxy-N-phenylmorpholin
Maleic acid
4-Mercapto-4'-allyloxydiphenylamine
Mercury phenylacetate
Mesodibutylacridin
Mesodiethylacridin
Mesodimethylnaphthylacridin
Mesodiphenylacridin
Mesoditolylacridin
Mesomethylacridin
Meta-allyloxydiphenylamine
Metadibenzylaminophenol
Metallic salts of—
(1) Aminophenols, primary, secondary, and tertiary
(2) Metamethylaminophenol
(3) Orthoaminophenols
(4) Para-aminophenols
(5) Para-anilinophenol
(6) Paradimethylaminophenol
(7) Parahydroxydiphenylamine
(8) Parahydroxyphenylbetanaphthylamine
(9) Parahydroxy-N-phenylglycin
(10) Parahydroxy-N-phenylmorpholin
Metasap base 532
Methylallyloxydiphenylamine
Methylcyclohexanol
Methylformamide
Methyl-4-hydroxyphenylcarbamyldimethyl dithiocarbamate
Methylphenylamino-2-allyloxydiphenylamine
Methylphenylcarbamyldicyclohexyl diethiocarbamate

(To be continued)

Petroleum Products

Easiness Develops in Various Refined Petroleum Products —Chemical Derivatives Generally Firm or Strong—Naphthas and Solvents in Heavy Demand—Britain Returns 12 Tankers

The steadily increasing production of crude oil and the maintenance of the rising trend of refinery operations last week caused easiness to develop in many refined petroleum products, notably gasoline. The weakness was not apparent in chemical derivatives, however, which were generally firm or strong.

A heavy demand for solvents and naphthas remained in the market, with the lack of transportation facilities the main problem faced by producers. Butane and propane remained very scarce and in heavy demand. Prices were strong. Other light fractions were buoyed by broadened buying interest. Paraffin call continued at high levels, with the trade still awaiting any possible price action. Petrolatums and white mineral oils were firm.

Twelve American oil tankers have completed their last voyage in the British shuttle service and now are available for return to normal operations, the Office of the Petroleum Coordinator said last week. These ships are among a total of forty, arrangements for the release of which by the British enabled removal of gasoline restrictions in the East. A total of fifteen were returned in October and twenty-five more are expected this month.

Solvents and Diluents

Aromatic Naphthas.—Buyers were still seeking adequate supplies. Stocks were low and offerings limited. Prices were steady.

Cleaners' Naphtha.—Few new developments were reported. Material was still short. Offerings curtailed. Prices steady.

Lacquer Diluent.—Market very tight. Stocks low. Prices firm.

Mineral Spirits.—Continued good demand from paint trade. Prices firm.

Rubber Solvent.—Slight slackening reported. Prices unchanged.

Stoddard Solvent.—Movement into consumption still large. Market somewhat tighter. Prices firm.

V.M. & P. Naphtha.—Takings of paint trade created active market. Inquiries more numerous. Prices unchanged.

Markets at Other Centers

Chicago—Oct. 31

Tight conditions prevail in these products. Buying pressure still is noted in many paint industries and allied sources.

Paraffin Wax

Domestic demand for paraffin wax rose to 54,027,000 pounds during August from 47,803,000 in July and 41,897,000 in August, 1940. Demand during January-August, 1941, totaled 345,147,000 pounds, compared with 219,115,000 in the similar period last year.

Production of wax in August dropped to 54,320,000 pounds, from 55,440,000 in the previous month. Output during August, 1940, was 33,320,000 pounds. January-August production was 413,280,000 pounds in 1941, against 342,720,000 in 1940. Imports during the month were 813,000 pounds this year, compared with 56,000 pounds in July and 15,926,000 in August, 1940. A total of 4,970,000 pounds were imported in January-August, 1941, against 60,872,000 in the same period last year. August exports were 16,716,000 pounds, compared with 16,740,000 in July and 8,968,000 in August, 1940. Exports during the first eight months of 1941 were 112,552,000 pounds, against 147,766,000 in the similar period of 1940.

Stocks of paraffin wax at the end of August totaled 85,824,000 pounds, compared with 101,434,000 at the end of July and 112,359,000 on August 31, 1940.

Price Changes

Advanced

None

Reduced

None

Market news that may have developed after this report was sent to press will be found on page 4.

Aromatic Naphthas.—Limited supply, market strong.

Cleaners' Naphtha.—Restricted offerings. Prices unchanged.

Lacquer Diluent.—Market scarcity, prices tight.

Mineral Spirits.—Orders extensive. Prices strong.

Rubber Solvent.—Offerings limited. No quotation change.

Stoddard Solvent.—Buying excellent. Prices unchanged.

V. M. & P. Naphtha.—Buying active. Quotations steady.

New Orleans—Oct. 31

A seasonal demand continued to be experienced on cleaning solvent and V.M.&P. naphtha, with prices exhibiting the usual stable trend.

Cleaning Solvent.—Demand routine; price steady.

V. M. & P. Naphtha.—Movement normal; no change in price.

San Francisco—Oct. 31

There is every indication of a continued broad demand for all types of petroleum specialties with evidence of the need for more aromatic naphthas from the East and Midwest.

Aromatic Naphthas.—Demand is in great evidence.

Petroleum Thinners.—Continues very lively.

Lacquer Diluent.—Continuous demand.

V. M. & P. Naphthas.—Continues good.

Rubber Solvent.—Routine.

Stoddard.—Remains good.

Cleaners' Naphthas.—Routine.

Tulsa—Oct. 31

Refiners more willing to contract over remainder of year. Spot market active and shipments on contract larger.

Cleaners' Naphtha.—Good demand, prices firm.

Stoddard Solvent.—Fair demand, prices unchanged.

V. M. & P. Naphtha.—Paint manufacturers active, quotations firm.

Mineral Spirits.—Good call, prices steady.

Lacquer Diluent.—Larger shipments, prices firm.

Rubber Solvent.—Less buying, prices easy.

Lighter Fractions

Butane.—Few offerings. Supplies very short. Demand large. Price strong.

Heptane.—Movement large. Good buying interest. Price steady.

Hexane.—Routine call for contract deliveries. Active spot market. Prices steady.

Octanes. — Demand broadening. Shipments fairly large. Price steady.

Pentanes.—Continued good buying interest reported. Deliveries heavier. Quotations unaltered.

Propane.—Very tight. Offerings limited. Demand heavy. Price strong.

Markets at Other Centers

Chicago—Oct. 3

Scarcity continues to prevail in various sections of this market. The price structure is strong throughout.

Butane.—Available quantity small. Prices strong.

Heptane.—Demand extensive. Market tight.

Hexane.—Good call, prices steady.

Octanes.—Buyer interest extensive. Prices strong.

Pentanes.—Demand large. Quotations unchanged.

Propane.—Limited supply; no price change.

Petrolatums and Waxes

Paraffin. — Very tight. Demand large. Stocks low. Prices firm.

Petrolatums. — Offerings restricted due to short supplies. Fair contract movement. Quotations unaltered.

White Mineral Oils.—Few new developments. Demand, offerings and prices at previous levels.

Markets at Other Centers

Chicago—Oct. 31

Continued pressure from buyers is reported in various sections of this market. Offerings remain at a relatively low level.

Paraffin.—Tight supply, prices strong.

Petrolatums.—Buying active, quotations steady.

White Mineral Oils.—Good orders. Prices firm.

Fuels and Lubricants

Gasoline.—Slightly weaker due to narrowing demand.

Kerosene.—In fair call. Tone stable.

Lubricating Oils. — Pennsylvania grades in heavy demand. Prices steady.

Chicago—Oct. 31

Gasoline in easier tone. Kerosene quiet. Lubricants remain generally in good call, with a firm undertone.

Gasoline.—Demand good, supply larger, prices unchanged.

Kerosene.—Fair demand, no price movement.

Lubricating Oils.—Active call, prices firm.

New Orleans—Oct. 31

Gasoline and kerosene moved along routine lines during the week, quotations being steady and unchanged.

Gasoline.—Demand normal; prices unchanged.

Kerosene.—Market slow, price stable.

Tulsa—Oct. 31

Normal seasonal reactions in the refined oil markets were in evidence this week. Offerings of gasoline were more numerous.

Gasoline.—Scarcity has disappeared. Prices easy.

Kerosene.—Good buying, prices steady.

Lubricants.—Tightness in all departments. Prices strong.

Natural Gasoline. — Broad demand. Prices unchanged.

Tulsa—Oct. 31

Fair activity continues in paraffin.

Paraffin.—Refiners behind in shipments; quotations firm.

Petrolatum.—Good call; quotations unchanged.

Tulsa—Oct. 31

Light fractions heavily in demand, with market tight in nearly all grades.

Butane.—Good call, prices firm.

Propane.—Offerings light, prices strong.

Pentane.—Demand larger, quotations firm.

McHugh Named La. Oil Head

New Orleans, Oct. 27, 1941

Joseph L. McHugh has been named acting conservation commissioner of Louisiana, succeeding W. H. Hodges, jr., resigned. Mr. McHugh has been serving as head of the minerals division, to which post he was appointed early this year.

Highest quality
NAPHTHENIC ACID
CRESYLIC ACID
VISCOUS OILS
(extremely viscous polymerized hydrocarbons)
CALODORANT
GAS ODORANT
STANDARD OIL COMPANY OF CALIFORNIA
225 BUSH STREET, SAN FRANCISCO, CALIFORNIA
CALIFORNIA COMMERCIAL COMPANY, INC.
30 ROCKEFELLER PLAZA, NEW YORK, N. Y.

PETROLATUMS
and
WHITE OILS
The better you know white oils and petrolatums, the better you'll like SHERWOOD'S.
SHERWOOD
REFINING COMPANY, INC.
Englewood, N.J. Refinery, Warren, Pa.

TECHNICAL
WHITE OILS
OIL STATES PETROLEUM CO., INC. Woolworth Bldg.,'New York
Plant: Bayonne, N.J.

PENN-DRAKE White Oils
Always ODORLESS
TASTELESS
CRYSTAL CLEAR
WATER WHITE
If you want the best at no extra cost, write
PENNSYLVANIA REFINING CO., BUTLER, PA.
Representatives and Stocks in Principal Cities
Makers of Finest Petrolatums and Petroleum Sulphonates

Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 7

Association meetings:—

American Petroleum Institute, Nov. 3-7, San Francisco.
Chemical Show, Grand Central Palace, New York, Dec. 1 to 6.

Scientific and Professional Services

Alexander, Jerome
Consulting Chemist and Chemical Engineer
Especial experience in colloid chemistry and its applications. Representation for Patents, Processes, Products and Apparatus. Research Advice, Investigations, Expert Testimony.
50 East 41st Street New York City
Member:—Association of Consulting Chemists and Chemical Engineers

ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC.
Organized to advance the science and practice of consulting chemistry and chemical engineering.
The membership, located from coast to coast, includes highly qualified specialists from all branches of the profession.
For Expert Consultants Address the Association—50 E. 41st St., NEW YORK, N. Y. *Room 82*

Philip B. Hawk, Ph.D., Pres. Bernard L. Oser, Ph.D., Dir.
FOOD RESEARCH LABORATORIES, INC.
48-14—33rd Street, Long Island City, N. Y.
Research — Consultation — Testimony
FOODS —— DRUGS —— COSMETICS
SPECIALIST IN VITAMINS
Members Association of Consulting Chemists and Chemical Engineers
Write for "Science at Your Service"

Charles H. LaWall—1871-1937 Joseph W. E. Harrisson
LaWALL and HARRISSON
Pharmaceutical and Chemical Research. Biological Assays. Pharmacological Studies in association with Clinical Tests. Routine Drug and Food Control.
214 So. 12th Street Philadelphia, Pa.

PROTECT YOUR IDEAS BY **PATENTS**
Call or Send me a Sketch or Simple Model
WHAT IS YOUR INVENTION?
Z. H. Polachek 1234 BROADWAY NEW YORK **PATENT ATTORNEY** CONFIDENTIAL ADVICE
REGISTER YOUR **TRADE MARKS**
U. S. Pat. Off. records searched ANY Invention or Trade Mark
FREE CONSULTATION LITERATURE
Phone: LOngacre 5-3088

Est. 1865
W. S. PURDY COMPANY, Inc.
TESTING AND CONSULTING LABORATORIES
PETROLEUM FUELS ASPHALTS COAL
WAXES GREASES FATS COSMETICS
PAINTS SOAPS TEXTILES
128 Water Street, New York HAnover 2-3772

SADTLER, SAMUEL P., & SON, Inc.
RESEARCH AND ANALYTICAL CHEMISTS
We will show you how to adapt available commodities to replace those now difficult to obtain.
210 South 13th Street Philadelphia, Pa.
"Nothing Pays Like Research"

Bureau of Chemistry
New York Produce Exchange
H. P. Trevithick, Ph.B., B.S.
2 Broadway New York
Cottonseed Oil, Oils, Greases, Soaps Turpentine, Glycerine, Cattle Feeds, Spices, Chemicals, etc.
Consultation—Research.

COLLAPSIBLE TUBE FILLING
PRIVATE BRANDS
SHAVING CREAM
DENTAL CREAM, TABLETS
LUBRICANTS, OINTMENTS, ETC.
Full Manufacturing Facilities
DAY CHEMICAL COMPANY
70-72 Marshall St., Newark, N. J.

W. H. DICKHART
CONSULTING & ANALYTICAL CHEMIST
OILS, FATS, FOODS, DRUGS
Official Chemist for the New York Mercantile Exchange and Olive Oil Assn. of America
6 HARRISON ST., N. Y.
Phone WAlker 5-3846

J. Ehrlich, Ph.D.
CONSULTING CHEMIST
153 South Doheny Drive
Beverly Hills, California
ORGANIC SYNTHESES
Fellow of the American Institute of Chemists

Ellis-Foster Company
Established 1907
Research and Consulting Chemists
Specializing in Synthetic Resins and their Plastics and Related Subjects.
4 Cherry Street Montclair, N. J.
Telephone—Montclair 2-3510

ANTI-KNOCK VALUE DETERMINATIONS
The Gray Industrial Laboratories
Chemists and Engineers
Specialists on Petroleum Products
961-976 Frelinghuysen Ave., Newark, N. J.
Telephone: BIgelow 3-4020

Horace J. Hallowell
Consulting Chemists
Analyses and reports made in all branches of industrial chemistry—soils, minerals, iron, alloys, fuels, beverages, drugs, pharmaceuticals, cosmetics, etc.
Investigations and research. Formulas developed.
323 Main Street Danbury, Conn.

DRAWBACK SPECIALISTS
Refunds of duty on materials used in exported products.
C. J. HOLT & CO., INC.
8-10 Bridge Street New York, N. Y.
Phone BOwling Green 9-6841

INDUSTRIAL CONSULTING LABS.
Inc.
Analytical and Consulting Chemists
PAINTS, VARNISHES, ENAMELS AND ALLIED PRODUCTS
128 Water Street HAnover 2-1999

Knight, B. H.
Analytical and Consulting Chemist
50 East 41st Street * * *
OFFICIAL ANALYST
U. S. Shellac Importers Assoc.
Am. Bleached Shellac Mfrs. Assoc.

Laning Company, E. M.
Specializing in Perfumes, Toilet Preparations, Pharmaceuticals and Flavors. Formulas perfected. Problems solved. Labels and Circular Matter revised to comply with the new Food, Drug and Cosmetic Act.
433 Stuyvesant Ave., Irvington, N. J. Phone ES. 2-8433
E. M. Laning, B. Sc., Manager.

Molnar Laboratories
Clinical Studies Research Bacteriology
New Drugs Analysis Legal Testimony
211 East 19th St. New York, N.Y
GRamercy 5-1030

Munch, James C., Ph.D.
Consultant and Laboratory Service
New and Old Drugs
Bioassays
Pharmacology
Clinical Studies
Special attention to Priorities Problems
306 South 69th St. Upper Darby, Pa.

Orthmann Laboratories, Inc.
AUG. C. ORTHMANN, Director.
Specialists in Leather and Allied Industries.
Consulting, Analytical and Research.
647 W. Virginia Street, Milwaukee, Wis.

John E. Raisch & Co.
OFFICIAL and LICENSED WEIGHERS, SAMPLERS and INSPECTORS, CARGO SUPERVISORS and CONTROLLERS.
Licensed by N. Y. Cotton, N. Y. Cocoa, N. Y. Coffee and Sugar, Commodity and N. Y. Produce Exchanges.
15 Moore Street New York, N. Y.
Tel. BO. 9—4644-4645

Leather - Tanning Materials - Furs
SAMPLING, ANALYSES, RESEARCH, CONSULTATION FOR LEATHER, FUR AND ALLIED TRADES
THE REED-BLAIR LABORATORIES
143-146 West 20th Street New York
Tel. CHelsea 2-3520—21

SCHWARZ LABORATORIES, Inc.
Analysts — Biologists — Consultants
BEVERAGES, OILS, FOODS, WATER, VITAMIN DETERMINATIONS
202 East 44th Street New York, N.Y.
MUrray Hill 2-0007

Seil, Putt & Rusby, Inc.
H. A. Seil, Ph. D., Earl B. Putt, Ph. B., B. Sc.
SPR
Analytical and Consulting Chemists
Drugs, Spices, Essential Oils, Flavoring Extracts, Foods, Beverages.
Phone MUrray Hill 3-6368.
16 East 34th St. New York City

Foster D. Snell, Inc.
Our staff of chemists, engineers and bacteriologists with laboratories for analysis, research, physical testing and bacteriology are prepared to render you Every Form of Chemical Service
303 Washington Street Brooklyn, N. Y.

Stillman & Van Siclen, Inc.
Chemical and Testing Engineers
Tests, Inspection and Supervision of Benzol, Toluol, Xylol, Tars, Pitches, Asphalts, Road Oils and all other Coal Tar and Petroleum Products.
Telephone: LOngacre 5-5260-5261
254 W. 31st Street New York, N. Y.

Stillwell & Gladding Established 1862
Analytical and Consulting Chemists
Oils, Soaps, Fats, Paints, Varnishes, Drugs, Gums, Foods, Glycerin, Turpentine, Waxes, Spices, etc.
Member Association Consulting Chemists and Chemical Engineers
130 Cedar Street New York

Roger W. Truesdail, Ph.D., President — William R. Bergren, Ph.D., Director of Research
TRUESDAIL LABORATORIES INC.
Chemists and Bacteriologists
Authentic VITAMIN and PHARMACEUTICAL Assays and Research
520 W. Ave. 26 Los Angeles

Weiss and Downs, Inc.
CONSULTING ENGINEERS
SYNTHETIC PHENOL
50 East 41st Street New York, N.Y.

Wiley & Co., Inc.
Analytical and Consulting Chemists
Specializing in analysis of beverages, fertilizers, phosphates, wood pulp, coal and coke, feeding materials, etc.
Calvert and Read Streets, Baltimore, Md.

In these days of exiguous supply of heretofore necessary materials, there is a bigger-than-ever need in all kinds of enterprises for special, expert advice and assistance for the finding of materials which will carry a process or a formula from the heretofore to the now. Perhaps the finding of another process or formula is called for. That sort of thing—finding this-day materials, processes, or formulas—is what the scientific and professional services adjacently offered are to be consulted for.

Defense Contracts Recently Awarded

Chemicals, oils, drugs, and related products required in connection with the program for national defense have recently been contracted for by the army and other governmental agencies as follows:—

Agricultural Purchase, Sales and Traffic

Superphosphate: — $20,625, Pelham Phosphate Co., Pelham, Ga.; $106,875, International Agricultural Corp., Chicago; $173,250, Arkansas Fertilizer Co., North Little Rock, Ark.; $30,576, Davison Chemical Corp., Baltimore; $253,000, Southern States Phosphate & Fertilizer Co., Savannah; $24,800, Southern States Phosphate & Fertilizer Co., Savannah; $90,250, Anderson Fertilizer Co., Anderson, S. C.

Army Air Corps

Desiccant, Corrosive Preventive:—$112,500, Davison Chemical Corp., Baltimore.

Fuel, Aircraft Engine:—$162,500, Standard Oil Co. of N. J., New York.

Lubricating Oil:—$57,165, Humble Oil & Refining Co., Houston.

Army Engineers

Diesel Fuel:—$7,306, Socony-Vacuum Oil Company, New York.

Kerosene:—$2,820, Gulf Oil Co., Jersey City, N. J.

Paint Supplies:—$3,467.50, Apex Color Works, Jersey City, N. J.

Army Medical Corps

Veterinary Items:—$1,518.75, J. Sklar Mfg. Company, Long Island City, N. Y.

Wool Fat:—$4,169, Merck & Co., Rahway, N. J.

Ammonium Bromide:—$16,509, American Pharmaceutical Co., New York.

Boric Acid, Camphor, and Sodium Bicarbonate: — $3,865, National Packages Drugs, Inc., St. Louis.

Castor Oil:—$42,428, Baker Castor Oil Co., New York.

Chemicals:—$32,900, American Pharmaceutical Co., New York.

Chrysarobin: — $34,688.75, New York Quinined & Chemical Works, Brooklyn, N. Y.

Drugs:—$13,756.50, Day Chemical Company, Newark, N. J.; $1,390.15, City Chemical Co., New York; $13,800, Eli Lilly & Co., Indianapolis; $56,187.40, Conray Products Co., New York.

Mercury:—$11,193.76, Hoover & Strong, Inc., Buffalo, N. Y.

Methenamine:—$2,526, Norwich Pharmacal Co., Norwich, N. Y.

Oil Chenopodium:—$690, Eli Lilly & Co., Indianapolis.

Sulphathiazol: — $29,250, Winthrop Chemical Co., New York.

Army Ordnance

Carbon Tetrachloride:—$1,092, E. I. duPont de Nemours & Co., New York, N. Y.

Carburizing Salt:—$1,750, E. F. Houghton & Co., Philadelphia.

Chemicals: — $2,780, Willima Messer Corp., New York; $92,800, E. I. duPont de Nemours & Co., Carney's Point, N. J.; $1,200,000, Shell Oil Company, Wood River, Ill.; $30,000, Wannamaker Chemical Co., Orangeburg, S. C.

Flares, Aircraft:—$575,400, Essex Specialty Company, Berkeley Heights, N. J.; $16,082.64, Kilgore Mfg. Company, Tipp City, Ohio.

Nitrocellulose: — $543,750, Hercules Powder Co., Wilmington.

Oil:—$5,340, Socony Vacuum Oil Company, New York; $1,870, Texas Company, New York.

Oil, Lard:—$1,653.50, Independent Mfg. Co., Philadelphia.

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of Oil, Paint and Drug Reporter, published weekly at New York, N. Y., for October 1, 1941.

State of New York, County of New York: Before me, a notary public in and for the State and county aforesaid, personally appeared Harry J. Schnell, who, having been duly sworn according to law, deposes and says that he is the business manager of the Oil, Paint and Drug Reporter, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, to wit:—That the names and addresses of the publisher, editor, managing editor, and business manager are:—Publisher, Schnell Publishing Company, Inc., 59 John street, New York; editor, Harry J. Schnell, 59 John street, New York; managing editor, Hugh Craig, 59 John street, New York; business manager, Harry J. Schnell, 59 John street, New York. That the owner is Schnell Publishing Company, Inc., 59 John street, New York. Stockholders holding 1 percent or more, Harry J. Schnell, 59 John street, New York, N. Y. That the known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities are:—Not any. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

(Signed) Harry J. Schnell, Business Manager.

Sworn to and subscribed before me this 20th day of October, 1941.

(Signed) Frank C. Lehning, Notary Public.

[My commission expires March 30, 1942.]

Fertilizer Materials

Organics End of Fertilizer Market Still Showing Weakness —Reduction in Cottonseed Meal Marks Sole Price Change Less Superphosphate Available—Other Chemicals Tight

Weakness continued to feature the organics end of the market for crude fertilizer materials. The sole reduction was in cottonseed meal, but easiness was reported in other directions. The demand for feed materials continued to taper off. Blood and tankage were in moderate call only. Offerings of bone materials were attracting fair buying interest. About 100 tons of dried menhaden futures were negotiated at the previous price. Spot menhaden meal was slightly stiffer.

There was little change in the chemicals end of the market. Superphosphate offerings became smaller as stocks dwindled. Production was hampered by lack of sulphuric acid. Little sulphate of ammonia was available for spot delivery. Potash salts were in large demand, with stocks low. Nitrate of soda was being sold on a spot basis to regular customers. The bag price of domestic nitrate has been extended through November.

Nitrogenates

Ammonia Phosphate. — Scarce. Prices withdrawn.

Anhydrous Ammonia.—Offerings restricted. No price change.

Castor Pomace.—Routine movement. Offerings normal. Price steady.

Dried Blood.—Movement light. Buying moderate. Prices steady and unchanged. Imports in July were 841 tons, valued at $27,594.

Fish Scrap.—About 100 tons of dried menhaden futures were reported sold at previous price of $4.75 and 10c. Spot menhaden meal quoted at $69 to $70 per ton, f.o.b. Baltimore.

Nitrate of Soda.—Fair movement. Market tight. Price steady. July imports were 16,350 tons, valued at $283,742.

Nitrogenous Material.—Few offerings. Nominal in Midwest. Firm in East.

Sulphate of Ammonia.—Heavy demand. Stocks low. Prices firm. July imports totaled 593 tons, valued at $20,775.

Tankage.—Quotations on feed material were still easy, although no further reductions were made. Demand was small. Fertilizer grade was moving in routine fashion, with no changes in prices. A total of 513 tons, valued at $21,635, was imported during July.

Potashes

Interest in potash salts remained at a satisfactory level during the past week. Movement was somewhat restricted due to the limit on offerings. Stocks were believed sufficient but were not too plentiful. Prices remained steady and unchanged.

Superphosphate

At the conference between Washington officials and men in the fertilizer trade on problems in the industry it was brought out that there is a sufficient supply of sulphuric acid for acidulation of phosphate rock to make superphosphate. Other factors enter the picture, however, which tend to hamper normal production.

Producers of sulphuric acid are continuing to take care of contracts but there is very little acid available in the spot market. Also, many superphosphate producers who obtain the acid on contract find it much more profitable to sell the acid than to use it in the acidulation process. For this reason expansion of production of superphosphate is being retarded. Evidence of this is the August output which dropped to 379,267 tons of bulk material, from 383,499 tons in July.

Price Changes

Advanced

None

Reduced

Cottonseed meal, 8%, Southeastern mills, $1 per ton.

Comparative Values

Index numbers complied from four typical fertilizer materials, on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
70.6	70.6	70.6	67.3

Market news that may have developed after this report was sent to press will be found on page 4.

Phosphates

Bone Materials.—These items were in fairly good call last week with offerings about what they had been in the previous period. Prices were firm.

Phosphate Rock.—Demand continued at good levels. Consumers were ordering in satisfactory volume. Prices were unchanged and stable.

Superphosphate.—Demand was still running ahead of available supply and was eating into producers' stocks. Manufacturers either were encountering difficulty in securing acid or were selling their acid for other purposes. Prices were virtually nominal.

Sulphur and Pyrites

Movement of crude sulphur was normal during the week, a fair interest being in evidence. Contract call was routine. There was a pickup in inquiries. Prices were steady.

Markets at Other Centers

Atlanta—Oct. 31

The softening of the organic nitrogen market is reflected in the continued decline of cottonseed meal.

Superphosphate.—Unchanged. Demand sluggist at present.

Nitrate of Soda.—Spot, $30 per ton, bulk, ports.

Sulphate of Ammonia.—$29 per ton, ports; scarce.

Cottonseed Meal.—Eight percent grade, $37 to $37.50, Southeastern points.

Blood.—Principal grade, $4.35 per unit, basis Chicago.

Baltimore—Oct. 31

Business in crude fertilizer materials appears to be tapering off, with inquiry less active and with potential buyers disposed to hold out for concessions.

Fish Scrap.—Sale of about 100 tons of scrap was reported at $4.75 and 10c. per unit-ton, f.o.b. factory. Meal was at $69 to $70 per ton for prompt shipment, with trading fair.

Superphosphate.—Conditions are unchanged, with trading moderate and with nominal quotations still at $9.50 per ton for run-of-pile, $10 per ton for 16 percent flat and $12 per ton for 20 percent stocks.

Tankage.—Buyers showing little interest, with sellers not pressing business.

Dried Blood.—Market quiet with stocks generally quoted at $4.15 per unit-ton.

Chicago—Oct. 31

Somewhat easier market conditions have been developing here and there in organics but for the most part the fertilizer materials market is being well maintained. Buying is moderate in blood and related products, but offerings are not in sufficient volume to indicate any unusual disturbance of the market as a whole. Bone materials have been steady and in quite good call as a general rule.

Blood.—Principal grade, $4.35 per unit of ammonia.

Tankage.—High grade, $4.50 and 10c.; hoof meal, $2.95 to $3; liquid stick, $2.45 to $2.55.

Bone Materials.—Ground, steamed bone, 1¼ and 60 percent, $40 to $41; 3 and 50 percent, $39 to $40; 4½ and 50 percent, $39 to $40; grinding hoofs, pigs' toes and waste horn materials, $40 to $42.50; cattle jaws, skulls and knuckles, $40 to $45; pork cracklings, soft pressed, $55 to $60; beef cracklings, soft pressed, $52.50 to $55; hard pressed cracklings, per unit of protein, $1.05 to $1.10.

San Francisco—Oct. 31

Offerings of sulphate of ammonia, in a very moderate way, have been absorbed from Canadian shippers. Fish meal has eased down considerably, and meat scraps also have declined.

Sulphate of Ammonia.—Trade in the hands of resellers, who are quoting $8 to $10 above schedule prices.

Nitrate of Soda.—Volume reported to be very good; 100-pound bags, $33 per ton, ex vessel or warehouse; 167-pound bags, $32.40; bulk, $30.

Superphosphate. — Domestic, 83c. per unit in bulk, f.o.b. San Francisco; bags, 99c.

Ammonia Phosphate. — Sellers not quoting. Resale market in southern California on 16/20 variety last reported to have been on basis of $52 to $55.

Fish Meal.—Easier. San Francisco Bay area production, 67 percent protein, $62.50. Monterey, 65 percent, $60. Prices f.o.b. production point.

Tankage.—Market fairly inactive. Dry rendered, ground, 50 percent, $52.50 per ton, f.o.b. cars; 55 percent, $56.50. Unground, dry rendered, 87½c. to 90c. per unit of protein, f.o.b. cars, South San Francisco. Wet rendered, nominal, $4 and 10c. per unit-ton.

Blood Meal.—Market steady. Foreign, $4.20 per unit, f.o.b. dock, Los Angeles. Domestic, $4.25 to $4.30, Los Angeles.

Richmond Guano Plant Destroyed by Fire

Baltimore, Oct. 26, 1941

The factory and storage plant of the Richmond Guano Company, manufacturer of fertilizers on the south side of the James river, about one mile below the city limits, were destroyed by fire on October 25. The low rambling frame structure covered about three acres.

Phosphate Plant Being Built In Florida by International

A phosphate rock plant is being built in Florida by the International Agricultural Corporation, whose stockholders last week voted to change the corporate name to the International Minerals & Chemicals Corporation. The plant is being constructed at a new area to offset exhaustion of phosphate ore in present areas. The company is also planning to build a phosphate plant in Tennessee.

Agricultural Chemists Elect Sale President

—Continued from page 3

A subject for discussion proposed by the committee on definitions of terms and interpretations of results read as follows:—

Due to the fact that instances have come to our attention that serious injury to livestock has resulted, some term such as "injurious to livestock" should be carried on bags containing nitrate of soda, nitrate of potash and nitrate of calcium.

Magruder Honored at NFA Dinner for Farm Chemists

OPD Washington Bureau October 27, 1941

The National Fertilizer Association's annual dinner on behalf of the chemical control committee of the Official Agricultural Chemists, was held last week in the Mayflower hotel. Dr. E. W. Magruder, chief chemist for the F. S. Royster Guano Company, was presented with a silver pitcher and tray in recognition of his twenty years of service to the industry. More than 100 guests were present.

Trade Briefs

Chester A. Fulton, president of the Southern Phosphate Corporation, has been elected to the directorate of the Davison Chemical Company, Baltimore.

H. F. Crum has been added to the sales staff of the Union Potash & Chemical Company, Chicago, and will be located at Raleight, N. C., working in North and South Carolina.

C. Brooks Peters, Berlin correspondent of the *New York Times* and son of Carl B. Peters, vice-president of the Synthetic Nitrogen Products Company, this city, recently arrived here by clipper from Lisbon.

Herbert H. Meyers, manager of the purchasing department of Virginia-Carolina Chemical Corporation, has been loaned on a part-time basis to the Office of Production Management, to work in connection with the OPM's chemical section.

FERTILIZER MATERIALS
Domestic — Import — Export
FRANK R. JACKLE
405 Lexington Ave., New York
Telephone: MU 9-9188
Cable Address: "JACKLECO"

★ Domestic MADE IN U.S.A.
THE BARRETT COMPANY
40 RECTOR ST., NEW YORK
SULPHATE OF AMMONIA
AND AMMONIA LIQUOR

CRUDE SULPHUR
99½% PURE
Free From
ARSENIC, SELENIUM AND TELLURIUM
TEXAS GULF SULPHUR COMPANY
(INCORPORATED)
75 East 45th St., New York City
Deposits and Plants: Newgulf and Long Point, Texas

Association meetings:—

American Society of Agronomy, Washington, Nov. 12-14.
National Fertilizer Ass'n, Atlanta, Ga., Nov. 17-19.
Chemical Show, Grand Central Palace, New York, Dec. 1 *to* 6.

Shipping Information

All matter under this head fully protected by copyright

Imports at U. S. Ports

New York Imports

ALOE—80 tins, Wessel, Duval & Co, Puerto Cabello
37 cs, Wessel, Duval & Co, Puerto Cabello

ANTIMONY CONC—500 bgs, Watson, Geach & Co, Antofagasta
ORE—726 bgs, Banco Minero de Bolivia, Antofagasta
731 bgs, Metal Traders, Salaverry
380 bgs, Watson, Geach & Co, Salaverry
1,060 bgs, Banco Minero de Bolivia, Antofagasta
400 bgs, W R Grace & Co, Callao
402 bgs, T J McGraff & Co, Vera Cruz
181 bgs, T J McGraff & Co, Vera Cruz

ASBESTOS—14,067 bgs, J P Morgan & Co
1,000 bgs, Johns Manville Corp
2,600 bgs, National City Bank
1,354 bgs, Davies, Turner & Co
2,000 bgs, National City Bank
2,134 bgs, Johns Manville Corp
1,667 bgs, J P Morgan & Co

ASPHALT—9,754 bbls, Barber Asphalt Corp, Brighton

BABASSU KERNELS — 1,000 bgs, General Food Sales Corp, Sao Luiz

BALSAM — 28 bxs, McKesson & Robbins, Puerto Barrios

BARIUM SULPHATE—1 bx, D F Sallows, Talara

BERILLO—765 bgs, Cabedello
1,111 bgs, Cabedello

BISMUTH, LEAD—46 bxs, Cerro de Pasco Copper Co, Callao

BLOOD, DRIED—500 bgs, Wessel, Duval & Co, Rio de Janeiro

BONES—1,068 bgs, American Agricultural & Chem Co, Cartagena
717 bgs, American Agricultural & Chem Co, Barranquilla

BUCHU LEAVES—30 bls, C L Huisking & Co

CALCIUM TARTRATE—484 bgs, Bank of California

CANARY SEED—82 bgs, Buenos Aires

CASTOR BEANS—10,439 bgs, Baker Castor Oil Co, Santos
10,263 bgs, Baker Castor Oil Co, Santos
1,734 bgs, Baker Castor Oil Co, Rio de Janeiro
4,000 bgs, Baker Castor Oil Co, Rio de Janeiro
2,340 bgs, Baker Castor Oil Co, Fortaleza
806 bgs, Spencer Kellogg & Sons, Fortaleza
1,550 bgs, Baker Castor Oil Co, Fortaleza
1,650 bgs, Baker Castor Oil Co, Fortaleza
3,120 bgs, Guaranty Trust Co, Fortaleza
1,312 bgs, Bunge North American Grain Co, Fortaleza
1,650 bgs, Baker Castor Oil Co, Fortaleza
3,400 bgs, Baker Castor Oil Co, Bahia
1,700 bgs, Spencer Kellogg & Sons, Bahia
1,694 bgs, Baker Castor Oil Co, Bahia
3,330 bgs, Bunge North American Grain Co, Pernambuco
1,700 bgs, Spencer Kellogg & Sons, Pernambuco
1,700 bgs, Baker Castor Oil Co, Pernambuco
4,120 bgs, Baker Castor Oil Co, Ceara
1,650 bgs, Spencer Kellogg & Sons, Ceara
1,002 bgs, Santos
3,400 bgs, Bahia
5,100 bgs, Guaranty Trust Co, Bahia
3,400 bgs, Bahia
6,800 bgs, Baker Castor Oil Co, Bahia
3,387 bgs, Baker Castor Oil Co, Maceio
847 bgs, Baker Castor Oil Co, Maceio
1,667 bgs, Maceio
1,666 bgs, Spencer Kellogg & Sons, Cabedello
1,694 bgs, Bluepoint Oil Corp, Cabedello
1,694 bgs, Baker Castor Oil Co, Cabedello
1,700 bgs, Guaranty Trust Co, Cabedello

CASTOR & COTTONSEED MEAL—2,174 bgs, Santos

CELERY SEED—173 bgs, H H Parker
61 bgs, Enst Asiatic Co

CHARCOAL—400 bgs, Hollingshurst & Co, Havana

CHEMICALS—1 bx, Eli Lilly & Co, Havana

CHILLIES—126 bgs, Joensson & Cross
258 bgs, Dodge & Olcott Co
258 bgs, B H Old & Co

CHROME ORE—3,910 tons, 12 cwts, E J Lavino & Co
5,000 bgs, E J Lavino & Co
330 bgs, Mercantile Metal Ore Co, Havana

CLAY—70 bgs, Santos

COCOA BEANS—2,500 bgs, Rockwood & Co, Ilheos
500 bgs, N Bartholomew & Co, Ilheos
3,000 bgs, Bank of London South America, Ilheos
4,500 bgs, Rockwood & Co, Ilheos
3,000 bgs, Bank of London South America, Ilheos
7,000 bgs, Rockwood & Co, Ilheos
1,500 bgs, Bank of London South America, Ilheos
3,000 bgs, Rockwood & Co, Ilheos
522 bgs, Wessel, Duval & Co, Cristobal
114 bgs, A A Lindo, Puerto Limon
2,000 bgs, Middleton & Co, Bahia
1,000 bgs, A C Israel Commission Co, Bahia
2,000 bgs, Wessel, Duval & Co, Bahia
1,000 bgs, Middleton & Co, Bahia
1,000 bgs, Nieschlag & Co, Bahia
500 bgs, J Henry Schroeder Banking Corp, Bahia
2,500 bgs, Nieschlag & Co, Bahia
1,500 bgs, Kennedy, Butcher & Co, Bahia
1,500 bgs, N Bartholomew & Co, Bahia
1,500 bgs, Rockwood & Co, Bahia
1,500 bgs, Bank of London South America, Bahia
3,000 bgs, W R Grace & Co, Bahia
1,000 bgs, Bank of London South America, Bahia
500 bgs, Nieschlag & Co, Victoria
220 bgs, General Cocoa Co, Port Spain
500 bgs, A Gusman, Curacao

CAKE—160 bgs, Manufacturers Trust Co, Rio de Janeiro

COCOABUTTER—167 bls, T M Duche & Co, Ilheos
34 bls, T M Duche & Co, Ilheos

COCONUT, DESIC—1,200 cs, General Food Sales Corp
770 bgs, General Food Sales Corp
1,000 cs, General Food Sales Corp
480 bgs, General Food Sales Corp
825 cs, Wood & Selick
965 bgs, Wood & Selick
370 ctns, Wood & Selick

COCONUT, DESIC—500 bgs, General Food Sales Corp
3,000 cs, General Food Sales Corp
1,430 bgs, General Food Sales Corp
1,950 bgs, General Food Sales Corp
857 cs, Durkee Famous Food
751 bgs, Durkee Famous Food
61 cs, Philippine Desic Coconut Corp
782 cs, Durkee Famous Food
933 bgs, Durkee Famous Food
470 bgs, Philippine Desic Coconut Corp
2,500 bgs, General Food Sales Corp

COCONUT SHELL—300 bgs, American Overocean Co, Kingston

COCONUTS—500 bgs, General Food Sales Corp, Kingston
526 bgs, I L Toledano Corp, Cristobal

COLOCYNTH—78 bls, R J Prentiss & Co
80 bls, S B Penick & Co
57 bls

COLOMBO ROOT—369 bgs, R J Prentiss & Co
130 bgs, Barclay Bank
200 bgs, S B Penick & Co

COLUMBITE ORE — 183 bgs, New York Trust Co

CORIANDER SEED—494 bgs, Toledano & Pinto

CORK—29 bgs, H E Botzow, Inc
DISCS—77 bgs
SHAVING—1,300 bls, Mundet Cork Corp
VIRGIN—475 bls, United Cork Co
500 bls, Mundet Cork Corp
525 bls, Mundet Cork Corp
WASTE—400 bls, Mundet Cork Corp
550 bls, Mundet Cork Corp
360 bls, Mundet Cork Corp
445 bls, Mundet Cork Corp
210 bls, Mundet Cork Corp
WOOD—13,255 bls, Armstrong Cork Co
343 bls, Armstrong Cork Co
260 bls, Armstrong Cork Co
209 bls, Mundet Cork Corp
385 bls, Pardo & Co
10 bls, Mundet Cork Corp
8,400 bls, French American Banking Corp
3,030 bls, Armstrong Cork Co
3,481 bls, French American Banking Corp

CORN POPPY FLOWERS—116 bls, R H Elmaleh

COTTON HULL FIBER—189 bls, Hercules Powder Co, Santos
189 bls, Hercules Power Co, Santos

LINTERS — 4 bgs, J E Bernard & Co, Santos
194 bls, Santos
94 bls, Philadelphia National Bank, Santos
285 bls, Gillespie & Co, Cabedello
273 bls, Gillespie & Co, Cabedello
116 bls, Natal
268 bls, Williamson Product Co, Santos
249 bls, Kanders Steuber Co, Santos
125 bls, Williamson Product Co, Santos
1,640 bls, Santos

RESIDUE—107 bls, Waldemar Fernanders Lego, Cabedello
421 bls, Waldemar Fernanders Lego, Cabedello
1 bl, Balfour, Guthrie & Co, Cabedello
419 bls, Williamson Product Co, Santos
136 bls, Williamson Product Co, Santos

COTTONSEED MEAL—3,920 bgs, Bank of London-South America
2,240 bgs, Bank of London-South America
1,734 bgs, Bank of London-South America
6,106 bgs, Bank of London-South America

CREAM TARTAR—200 bbls, Manufacturers Trust Co
69 bgs, W R Grace & Co, Callao

CUMARU—44 bbls, Balem

CUTTLEFISH BONES — 35 cs, Gerhard & Hey

CYANIDE PRECIP—13 cs, South American Development Co, Guayaquil

DIVI DIVI—1,054 bgs, S Stern Stiner Co, Aruba
2,337 bgs, Curacao

DYES, ANILIN — 39 dms, Sandoz Chem. Works

FISH BERRIES—28 bgs, S B Penick & Co
25 bgs, Indian Alkaloid Co

FLAXSEED — 2,032,000 kilos, 81,280 bu, Buenos Aires
973 bgs, 2,140 bu, Buenos Aires
957,000 kilos, 38,280 bu, Buenos Aires

FLEASEED—172 bgs, T M Duche & Sons

FUSTIC—44 logs, American Dyewood Co, Kingston

GLUESTOCK—10 bls, Darmstadt, Scott & Courtney, Buenos Aires
25 bls, Darmstadt, Scott & Courtney, Buenos Aires
30 bls, H Remis, Havana

GLYCERIN, CRUDE—95 dms, C J Schelling & Co, Buenos Aires
52 dms, Coro Exchange Bank Trust Co, Buenos Aires

GUM, ARABIC—500 bgs, Innis, Speiden & Co
250 bgs, Lexseed Co
500 bgs, Thurston & Braidich
1,030 bgs, Paul A Dunkell & Co
50 bgs, S B Penick & Co
150 bgs, A D Isbetcherian
250 bgs, Irving Trust Co
250 bgs, Thurston & Braidich
300 bgs, Irving Trust Co
250 bgs, Thurston & Braidich
300 bgs, Paul A Dunkell & Co

CACTUS—1 bg, Paul Chem Co, Vera Cruz

CHICLE—426 bls, Chicle Development Co, Puerto Barrios

PERILLO—97 bls, Chicle Development Co, Barranquilla

HENNA LEAVES—43 bls, Anglo-American Colonial Co
99 bls, Avakian Bros

HOREHOUND—455 bls, J S Toby
143 bls, R H Elmaleh

IPECAC ROOT—15 bgs, S B Penick & Co, Rio de Janeiro
40 bdls, S B Penick & Co, Rio de Janeiro
3 bgs, Wessel, Duval & Co, Puerto Limon

IRON, OXIDE—341 bbls, C K Williams & Co
182 bbls, C J Osborn & Co
175 bbls, Robinson-Wagner Co
250 bbls, C K Williams & Co
175 bbls, Smith Chemical & Color Co
75 bbls, Reichard-Coulston, Inc

LAUREL LEAVES—20 bls, Wessel, Duval & Co, Puerto Barrios
435 bls, S B Penick & Co, Puerto Barrios
100 bls, Impex, Inc, Puerto Barrios

LEAVES, MED—11 bls, S B Penick & Co

LICORICE ROOT—250 bgs, Kachurin Drug Co
336 bgs, Peek & Velsor
50 bgs, Kachurin Drug Co
125 bgs, Kachurin Drug Co

LIVER IN POWDER—400 bgs, Rio de Janeiro
320 bgs, Rio de Janeiro

LOGWOOD EXTRACT — 60 cks, American Dyewood Co, Kingston
40 cks, United Fruit Co, Kingston

MANGANESE ORE—3,000 tons, E J Lavino & Co

MANGROVE BARK—260 bgs, Wessel, Duval & Co, Cristobal
111 bgs, Barkey Import Co

MANIOC FLOUR—1,000 bgs, Java American Export Co, Rio de Janeiro
1,000 bgs, Guaranty Trust Co, Rio de Janeiro
1,000 bgs, Chase National Bank, Rio de Janeiro
1,000 bgs, Perkins Glue Co, Rio de Janeiro
3,495 bgs, Java American Export Co, Rio de Janeiro
1,000 bgs, Chase National Bank, Rio de Janeiro
1,465 bgs, Perkins Glue Co, Rio de Janeiro
2,983 bgs, Java American Export Co, Rio de Janeiro
1,000 bgs, Java American Export Co, Rio de Janeiro
2,500 bgs, Stein, Hall & Co, Rio de Janeiro
1,680 bgs, Rio de Janeiro
500 bgs, National City Bank, Rio de Janeiro
2,032 bgs, Chase National Bank, Rio de Janeiro
1,700 bgs, National City Bank, Rio de Janeiro
813 bgs, Santos
2,500 bgs, Java American Export Co, Santos

MEDICINAL PREPS—2 cs, D C Andrews & Co, Santos
9 cs, Atlantic Freight Co, Santos
20 cs, E Fougera & Co, Rio de Janeiro
1 cs, Royal Trading Co, Rio de Janeiro
2 cs, Interocean Export Co, Rio de Janeiro
1 bx, D C Andrews & Co, Havana

MICA—100 cs, Rio de Janeiro
72 cs, Holland American Trading Co, Buenos Aires
41 cs, American Mica Works, Rio de Janeiro
60 cs, Flomarcy Co, Rio de Janeiro
49 cs, Ford Radio & Mica Co, Rio de Janeiro
30 cs, American Mica Works, Rio de Janeiro
6 cs, Aviation Equipment Export, Inc, Rio de Janeiro
11 cs, State Export Co, Rio de Janeiro

BLOCK—2 cs, Heyman & Co
DISCS—12 cs, Gillespie-Rogers-Pyatt Co
FILM—1 cs, Gillespie-Rogers-Pyatt Co
4 cs, Heyman & Co

MINERAL—32 cs, New York Trust Co

SPLITTINGS—100 cs, Cornelis & Suhr
1 cs, Gillespie-Rogers-Pyatt Co
206 cs, Heyman & Co
100 cs, Cornelis & Suhr
440 cs, Gillespie-Rogers-Pyatt Co

MINERAL SAMARSKITE—62 bgs, New York Trust Co

OAK MOSS—29 bgs, S B Penick & Co

OIL, CASTOR—802 dms, Baker Castor Oil Co, Bahia
250 dms, Pan-American Trust Co, Bahia
254 dms, Davies, Turner & Co, Rio de Janeiro

CHINAWOOD—1,125 dms, Universal Trading Corp
1,336 dms, Universal Trading Corp

CINNAMON LEAF—27 dms, Chase National Bank
28 dms, Chase National Bank

CITRONELLA—17 dms, Catz American Co

COTTONSEED—220 dms, Gillespie & Co, Cabedello
166 dms, Bank of London South America
526 dms, L N Jackson, & Co, Santos

ESSENTIAL—1 dm, Dodge & Olcott Co, Kingston
1 dm, Magnus, Mabee & Reynard, Kingston
6 dms, H A Sothern, Puerto Barrios
7 bls, H A Sothern, Puerto Barrios
3 cs, Polak & Schwarz, Vera Cruz
14 cs, Wells Fargo & Co, Vera Cruz
22 cs, Wells Fargo & Co, Vera Cruz
2 dms, Corn Exchange Bank Trust Co, Vera Cruz
2 dms, Guaranty Trust Co, Vera Cruz
8 cs, Geo Luederes & Co, Vera Cruz
1 dm, Vera Cruz

FUEL — 10,000 bbls, Asiatic Petroleum Corp, Curacao

GERANIUM—2 cyls, Algiers
5 dms, Eric Coupey

LAVENDER—9 dms, Norda Essential Oil & Chem Co
2 dms, Fritzsche Bros
4 dms, Dodge & Olcott Co
7 dms, Norda Essential Oil & Chem Co

LEMON—1 dm, Chase National Bank, Vera Cruz
2 dms, Corn Exchange Bank Trust Co, Vera Cruz

LEMONGRASS—3 dms, Bank of Manhattan
12 dms, Dodge & Olcott Co
6 dms, Geo Luederes & Co
29 dms, Norda Essential Oil & Chem Co
18 dms, Magnus, Mabee & Reynard
6 dms, Geo Lueders & Co

LINALOE—16 dms, Chase National Bank, Vera Cruz
4 dms, Irving Trust Co, Vera Cruz
4 dms, Norda Essential Oil & Chem Co, Vera Cruz
1 dm, Vera Cruz

OIL, OITICICA—168 dms, Archer-Daniels-Midland Co, Ceara

ORANGE—17 cs, Fritzsche Bros, Santos
22 cs, National City Bank, Santos
6 cs, Fritzsche Bros, Rio de Janeiro
26 cs, Chase National Bank, Rio de Janeiro
10 cs, Rio de Janeiro
22 cs, National City Bank, Santos

PIMENTO LEAF—4 dms, J A Manton, Kingston

ROSEMARY—4 dms, Norda Essential Oil & Chem Co

SANDALWOOD—30 cs, Geo Uhe & Co
27 cs, Geo Luederes & Co
67 bgs, Murphy Beese & Co
15 cs, Geo Uhe & Co
27 bgs, Murphy Beese & Co
27 bgs, Murphy Beese & Co
10 cs, Geo Lueders & Co

ORRISROOT—25 bgs, R H Elmaleh
15 bgs, I A Levy
45 bge, R H Elmaleh

ORANGE FLOWER WATER — 5 dms, J Manheimer, Puerto Prince
3 dms, Ungerer & Co, Puerto Prince
1 dm, Magnus, Mabee & Reynard, Puerto Prince

PAPAIN—10 cs, S B Penick & Co

PAPRIKA—47 cs

PEPPER, BLACK—4,700 bgs, Catz American Co
2,115 bgs, Catz American Co

PIMENTO—100 bgs, J A Manton, Kingston
150 bgs, Otto Gerdau Co, Kingston
200 bgs, Otto Gerdau Co, Kingston
150 bgs, United Fruit Co, Kingston

SEED—400 bgs, Banco de Chile, Valparaiso

PYRETHRUM FLOWERS — 625 bls, John Powell & Co
750 bls, Gulf Oil Corp
125 bls, R J Prentiss & Co
125 bls, Dodge & Olcott Co
250 bls, McLaughlin, Gormley & King
250 bls, S B Penick & Co
125 bls, John Powell & Co
250 bls, S B Penick & Co

QUEBRACHO EXTRACT—1,957 bgs, Irving Trust Co, Buenos Aires

QUICKSILVER—1 flask, H A Jordan, Vera Cruz
32 flasks, Chase National Bank, Vera Cruz
20 flasks, F W Berk & Co, Vera Cruz
9 flasks, Chase National Bank, Vera Cruz
65 flasks, New York & Cuba Mail S S Co, Vera Cruz

ROCK CRYSTAL—10 cs, National City Bank, Rio de Janeiro
17 cs, Lamport & Holt Line, Bahia
424 cs, L J Buck, Rio de Janeiro
1 cs, Eugen Leyendecker, Rio de Janeiro

ROSE BUDS—90 bls, Toledano & Pinto
42 bls, R H Elmaleh

ROSEMARY LEAVES — 206 bls, Kachurin Drug Co

SAGE LEAVES—116 bls
114 bls

SAPONIN—53 cs, W R Grace & Co, Valparaiso

SCHEELITE—100 dms, Bank of Manhattan, Buenos Aires

SENNA LEAVES—239 bls, Guaranty Trust Co
41 bls, J L Hopkins & Co

SIFTINGS—12 bls, J L Hopkins & Co

SESAME SEED—300 bgs, Archibald & Kendall, Cristobal

SHELLAC—450 bgs, Mac Lac Co
200 bgs, Mantrose Corp
50 bgs, E Meer & Co
200 bgs, Mac Lac Co
650 bgs, Mac Lac Co
200 cs, Wm Zinsser
900 bgs, Wm Zinsser

SEEDLAC—200 bgs, E E Androvette
200 bgs, Schwab Bros
200 bgs, Mac Lac Co
100 bgs, Mantrose Corp
150 bgs, Schwab Bros
275 bgs, Parks Co
400 bgs, Mantrose Corp
300 bgs, Mantrose Corp
200 bgs, Mantrose Corp

SOAPSTOCK, COTTONSEED — 495 dms, Funley & Co, Buenos Aires

SODA, SILICOFLUORIDE—40 bbls, 24,024 lbs, Mercantile Import & Export Co

SPONGES—12 bls, Havana
WASTE—6 bls, Havana

SQUILL—273 bgs, Algiers

STRAMONIUM LEAVES—32 bls, J Asturios, Puerto Barrios
9 bls, Inland Alkaloid Co
207 bls, S B Penick & Co

TALLOW—380 cks
126 cks, Bank of New Zealand
109 dms, Guaranty Trust Co
234 cks
520 dms, National City Bank
314 cks, Tupman-Thurlow Co

TANTALITE—25 bgs, Cabedello
50 cs, Cabedello
40 cs, Cabedello

TAPIOCA FLOUR—502 bgs, Aaron D Welds Sons
9 bgs, Rockland Laundry Co, Havana
2,000 bgs, S Stern Stiner Co, Rio de Janeiro
1,000 bgs, Rio de Janeiro

TARA—380 bgs, National City Bank, Salaverry
210 bgs, W R Grace & Co, Salaverry
377 bgs, National City Bank, Salaverry
203 bgs, National City Bank, Salaverry

POWDERED—340 bgs, The Tannin Corp, Salaverry

TARTAR—671 bgs, Standard Brands
691 bgs, Standard Brands
268 bgs, Stauffer Chem Co
320 bgs, Stauffer Chem Co
366 bgs, Stauffer Chem Co
293 bgs, Charles Pfizer & Co
472 bgs, Charles Pfizer & Co
290 bgs, Charles Pfizer & Co
191 bgs, American Cream Tartar Co
89 bgs, American Cream Tartar Co
3,459 bgs, Standard Brands

THYME LEAVES—100 bls, Corn Exchange Bank Trust Co
26 bls, J H Forbes
97 bls
130 bls

TIN ORE—1 bg, Watson, Geach & Co, Arica

RESIDUE—34 pkgs, Pope Trading Corp

TOLU BALSAM—20 cs, Pan-American Export & Import Co, Barranquilla
100 cs, F W Berk & Co, Barranquilla
71 cs, I Mezrahi, Barranquilla

TONKA BEANS—245 bbls, Guaranty Trust Co, Puerto Cabello
2 cks, C Stein Stifer Co, Port Spain

TUNGSTEN, CONC—61 bgs
ORE—500 bgs, Banco Minero de Bolivia, Antofagasta

YOU, too, should have your imports listed here for the information of OPD readers—it costs you nothing.
Mail lists of arrivals promptly and regularly, or telephone them — REctor 2-9820.

VANADIUM ORE—7,996 bgs, Vanadium Corp of America, Callao
WATTLE BARK—1,629 bls, Barkey Import Co
WAX, BEES—23 bgs, Puerto Barrios
100 bgs, Wessel, Duval & Co, Rio de Janeiro
101 bgs, Rio de Janeiro
100 bgs, D Steengrafe, Rio de Janeiro
100 bgs, Wessel, Duval & Co, Rio de Janeiro
101 bgs, Rio de Janeiro
722 bgs, Consular Distrib & Trading Co
16 bgs, D Steengrafe, Havana
13 bgs, H H Pike & Co, Havana
36 bgs, D Steengrafe, Havana
16 bgs, Vera Cruz
24 bgs, Well & Baumer Candle Co, Havana
CARNAUBA—23 bgs, Wm M Allison & Co, Rio de Janeiro
56 bgs, Smith & Nichols, Ceara
56 bgs, W R Grace & Co, Ceara
56 bgs, Smith & Nichols, Ceara
56 bgs, W R Grace & Co, Ceara
56 bgs, Wm M Allison & Co, Ceara
56 bgs, American Cyanamid & Chem Co, Ceara
55 bgs, Lenape Trading Co, Ceara
55 bgs, W R Grace & Co, Ceara
56 bgs, American Cyanamid & Chem Co, Natal
11 bgs, Wessel, Duval & Co, Fortaleza
6 bgs, Rio de Janeiro
67 bgs, Bank of London South America, Rio de Janeiro
157 bgs, Bank of London South America, Rio de Janeiro
OURICURY—55 bgs, Avon Trading Corp, Bahia
55 bgs, Wessel, Duval & Co, Bahia
60 bgs, Avon Trading Corp, Bahia
56 bgs, American Cyanamid & Chem Co, Bahia
125 bgs, American Cyanamid & Chem Co, Bahia
72 bgs, Strohmeyer & Arpe Co, Rio de Janeiro
55 bgs, Public National Bank, Rio de Janeiro
55 bgs, Guaranty Trust Co, Rio de Janeiro
WINE LEES—160 bgs, British American & Eastern Corp, Buenos Aires
WOLFRAM, CONC — 141 bgs, American Smelting & Refg Co, Antofagasta
ORE—8,000 bgs
502 bgs, W R Grace & Co, Mollendo
15 bgs
WOLFRAMITE—37 dms, Bank of Manhattan, Buenos Aires
362 bgs, Irving Trust Co, Buenos Aires
216 bgs, Bank of Manhattan, Buenos Aires
YEAST—2 pkgs, Standard Brands, Havana
ZINC OXIDE—400 bgs, Vera Cruz
ZIRCON SAND—800 bgs, Rare Mineral & Metal Co, Victoria

New York Transit Imports

BLOOD, DRIED—1,003 bgs, Weaver & Hugi, Buenos Aires to Norfolk
1,003 bgs, Columbus Rendering Co, Buenos Aires to Norfolk
1,200 bgs, Weaver & Hugi, Buenos Aires to Norfolk
1,000 bgs, Wessel, Duval & Co, Buenos Aires to Norfolk
1,276 bgs, H J Baker & Bros, Buenos Aires to Norfolk
1,000 bgs, Wessel, Duval & Co, Buenos Aires to Norfolk
1,732 bgs, Buenos Aires to Norfolk
1,000 bgs, Louis Rendering Co, Buenos Aires to Norfolk
1,003 bgs, Wessel, Duval & Co, Buenos Aires to Norfolk
2,005 bgs, Wessel, Duval & Co, Buenos Aires to Norfolk
BONEMEAL—2,000 bgs, Consolidated Chem Industries, to Norfolk
2,000 bgs, Consolidated Chem Industries, to Norfolk
BONES—1,143 bgs, Bank of Buchanan, Buenos Aires to Norfolk
1,179 bgs, Bank of Buchanan, Buenos Aires to Norfolk
1,612 bgs, Bank of Buchanan, Buenos Aires to Norfolk
COTTON LINTERS—71 bls, New England Waste Co, Pernambuco, Boston
GELATIN—1,000 cs, Davis Gelatine, Ltd, to Montreal
LIVERMEAL—360 bgs, Ashcraft Wilkinson Co, to Atlanta
OIL, COCONUT—888 tons, Philippine Refg Corp, to Boston
PAPAIN—67 cs, American Ferment Co, to Buffalo
QUEBRACHO EXTRACT—450 bgs, International Product Corp, Buenos Aires, Norfolk
4,200 bgs, American Tanners, Ltd, Buenos Aires, Boston
2,000 bgs, Consolidated Chemical Industries, Buenos Aires, Norfolk
TALLOW—795 cks, H J Baker & Bro, to Montreal
798 cks, Canada Packers, to Montreal
67 cks, Canada Packers, to Montreal
106 cks, H J Baker & Bro, to Montreal
125 dms, Colgate-Palmolive-Peet Co, to Montreal
50 cks, National City Bank, to Montreal
1,270 cks, Montreal
208 cks, Procter & Gamble Co, to Hamilton
220 cks, H J Baker & Bro, to Montreal
134 cks, H J Baker & Bro, to Montreal
50 cks, Lever Bros, to Toronto
110 cks, H J Baker & Bro, to Montreal
TANKAGE—1,000 bgs, Allied Mills, Buenos Aires, Chicago
977 bgs, Norfolk Tallow Co, Buenos Aires, Norfolk
1,000 bgs, Ashcraft Wilkinson Co, Buenos Aires, Atlanta
2,204 bgs, Wessel, Duval & Co, Buenos Aires, Norfolk
1,545 bgs, Buenos Aires to Norfolk
4,000 bgs, Wessel, Duval & Co, Buenos Aires to Norfolk
2,000 bgs, Wilson & Co, Buenos Aires to Norfolk
700 bgs, Louis Rendering Co, Buenos Aires to Norfolk
1,000 bgs, Wilson & Co, Buenos Aires to Norfolk
TAPIOCA FLOUR—502 bgs, Aaron D Welds Sons, to Boston

Baltimore Imports

GASOLINE—80,667 bbls, Standard Oil Co N J, Aruba
IRON ORE—22,260 tons, Bethlehem Steel Co, Cruz Grande
11,800 tons, Bethlehem Steel Co, Cruz Grande
5,900 tons, Bethlehem Steel Co, Felton
KYANITE ORE—1,001 tons, Calcutta
MANGANESE ORE—3,750 tons, Santiago, Cuba
2,800 tons, Calcutta
1,200 tons, Vizagapatam
MYROBALANS—1,688 pockets, Calcutta
OIL, FUEL—100,000 bbls, Standard Oil Co N J, Aruba

Obituaries

—Continued from page 4

Dr. Louis Klein

Dr. Louis Klein, director of clinical research at Hoffman-LaRoche, Inc., pharmaceutical manufacturer, Nutley, N. J., died October 25 after a heart attack, in his home in Upper Montclair, N. J. He was fifty-six years of age.

Born in Brooklyn, Dr. Klein was graduated from Medical College of Long Island University and entered practice as a private physician in 1917. In 1920 he joined Parke-Davis & Co., pharmaceutical manufacturer, Detroit, remaining with that firm until 1935, when he joined Hoffman-LaRoche as clinical research director. He was also editor of the *Hoffman-LaRoche Review*, a journal published by the company for the medical profession.

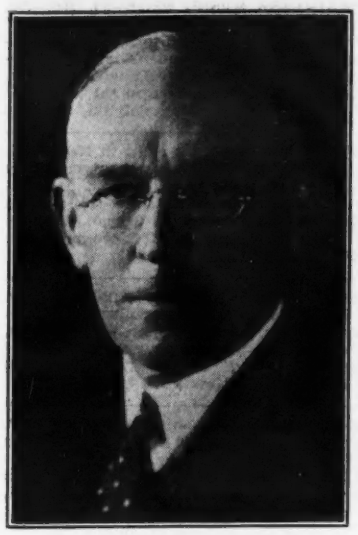
Surviving are his wife and two sons, Robert L. Klein, of Montclair, and Cyrus P. Klein, an interne at Harper Hospital, Detroit.

William M. Beard

William M. Beard, a director, and former vice-president, secretary and treasurer of Union Carbide & Carbon Corporation, died at his home in Glen Ridge, N. J., October 28. He was sixty-five years old.

Born in St. Louis, Mo., Mr. Beard graduated from Yale University, after which he entered Columbia Law School where he remained two years, taking the third and last year of his law course at the University of California. He graduated from the latter university in 1899, with the degree of LL.B.

After graduation Mr. Beard practiced law at Poughkeepsie, N. Y., and later in New York until 1913, when he became associated with the Linde Air Products Company and other companies which later became units of Union Carbide & Carbon Corporation. Mr. Beard became an officer and director of numerous units of the corporation after it was organized in 1917. He was treasurer of Union Carbide & Carbon Corporation from 1923 to 1934, secretary from 1926 to 1937, vice-president from 1931 to 1937, and a director from 1937 to the date of his death.



William M. Beard

Surviving are his wife, one son and a daughter.

Robert N. Beard, president of Beard Wall Paper & Paint, Inc., Omaha, Neb., died recently in that city.

Frank C. Clark, general manager at the plant of the Solvay Process Company, Hopewell, N. J., died October 29 in Petersburg, Va., after a brief illness. He was sixty years old.

Mrs. Helen Hagen, wife of Otto A. C. Hagen, president of Otto A. C. Hagen Corporation, Philadelphia, Pa., died October 30 after a four-month illness.

E. D. Holcomb, pioneer East Texas and Louisiana oil man, died recently in Shreveport, La. He was sixty-two years of age.

Samuel Horowitz, founder and president of the S. & E. Trading Company, chemical manufacturer, Kearny, N. J., died last week of a heart attack. He was fifty-six years old.

Joseph Lacourciere, president of Connecticut council of the Painting and Decorating Contractors of America in 1931, died October 26 in Meriden, Conn.

Gus Laemmar, associated with the Nubian Paint & Varnish Company for thirty years, died October 25. He was sixty-six years of age.

Edwin S. Ludwig, for forty-six years connected with Florida's phosphate industry, died recently at his home in Gainesville, Fla. He was seventy-nine years of age.

Mrs. B. L. Maltbie, wife of B. L. Maltbie, of the Maltbie Chemical Company, died October 24.

Mrs. Edythe C. Moore, wife of the comptroller of the White Laboratory, pharmaceutical manufacturer, Newark, died October 26. She was fifty years old.

Hamilton Riddell Smith, secretary-treasurer of the Louisville Refining Company, died at his home in Louisville, on October 25. He was sixty-five years of age.

Consolidated Chemical Industries plans an expenditure of $560,000 on an expansion of its Baton Rouge, La., plant.

PETROLEUM, CRUDE—116,933 bbls, Standard Oil Co N J, Las Piedras
SESAME SEED—248 bgs, Calcutta
SHELLAC—1,150 bgs, Calcutta

New Orleans Imports

COCONUTS—140 tons, Belize
GUM, CHICLE—19 tons, Puerto Barrios
109 tons, Belize
197 tons, Cozumel

Philadelphia Imports

CHROME ORE—3,900 tons, Pastelillo
5,380 tons, Port Said
COCONUTS—35 bgs, Brown & Co, Manila
105 cs, Louis A Ludwig Co, Manila
25 cs, Trade Wind Foods, Manila
COCONUT, DESIC—360 bgs, Pennsylvania Warehouse & Safe Deposit Co, Manila
400 cs, Manila
COTTONSEED SOAPSTOCK — 321 bbls, Philadelphia National Bank, Buenos Aires
GASOLINE — 80,185 bbls, The Texas Co, Aruba
GLYCERIN, CRUDE SOAPLYE — 48 dms, Corn Exchange National Bank & Trust Co, Buenos Aires
MOLASSES—1,497,572 gls, Palo Alto
2,337,990 gls, Publicker Alcohol Co, Havana
NUTGALLS—252 bgs, Hongkong
84 bgs, E M Sargent & Co, Hongkong
PETROLEUM, CRUDE—96,000 bbls, Atlantic Refining Co, Cumarebo
77,000 bbls, Sinclair Refining Co, Tuxpam
59,935 bbls, Sinclair Refining Co, Tampico
297,970 bbls, Gulf Oil Corp, Puerto La Cruz
SODA NITRATE—158,108 bgs, Chilean Nitrate Co, Iquique

U. S. Exports

Baltimore Exports

AMMONIA, SULPHATE—1,786 tons, Manila
ARSENIC, POWD—22,800 lbs, Capetown
CEMENT—2,500 scks, South America; 500 bbls, South America
INSECTICIDE—55,173 lbs, Capetown
SODA, ASH—138,600 lbs, Rio Janeiro; 551,100 lbs, South America
CAUSTIC—140,000 lbs, Santos
1,102,500 lbs, Buenos Aires

New Orleans Exports

ACID, MURIATIC—11 tons, Ceiba
ASPHALT—14 tons, Vera Cruz; 470 tons, Cristobal
CALCIUM ARSENATE—107 tons, Cristobal
CORNSTARCH—21 tons, Cristobal
LARD—33 tons, Havana
MANGANESE ORE—25 tons, Vera Cruz
OIL, DIESEL—71 tons, Puerto Cabezas; 103 tons, Ceiba
FUEL—287 tons, Ceiba
LUBRICATING—28 tons, Havana; 71 tons, West Coast South America; 27 tons, Cristobal; 11 tons, Puerto Barrios
LUBRICATING & GREASE—314 tons, Vera Cruz
PARAFFIN—113 tons, West Coast South America; 250 tons, Vera Cruz; 90 tons, Cristobal
SALT—31 tons, Havana
SODA CAUSTIC—139 tons, Vera Cruz
PHOSPHATE—7 tons, Vera Cruz
SULPHUR—70 tons, Vera Cruz

Philadelphia Exports

ASPHALT—2 dms, Rio de Janeiro
CEMENT, RUBBER—5 dms, Santos
GASOLINE—20,000 cs, Santos
GREASE, LUBRICATING—1 cs, Santos; 3 bbls, Santos; 1 pail, Santos
OIL, LUBRICATING—747 csks, Rio de Janeiro; 563 cs, Rio de Janeiro; 150 cs, Santos
PAINT—1 cs, Santos; 151 pails, Santos; 39 dms, Santos
PETROLATUM—130 csks, Rio de Janeiro; 145 bbls, Rio de Janeiro

Synthetic Resins and other Branded Paint Materials

(Manufacturers' List Prices)

Vanadiset—Vinylite

—Continued from page 29

Vanadiset resin, dlvd. Greater N. Y., North N. J., Conn., contract, 26-1000 tons per month	ton.	28.60 -34.00
spot, 1-25 tons per shpt	ton.	40.00 -60.00
under 1 ton, per shpt	ton.	80.00 - —
Ill., Ky., Tenn., contract, 26-1,000 tons per month	ton.	33.60 -39.00
spot, 1-25 tons per shpt	ton.	43.00 -67.80
under 1 ton, per shpt	ton.	87.80 - —
Iowa, Wis., Minn., contract, 26-1000 tons per month	ton.	33.60 -39.00
spot, 1-25 tons per shpt	ton.	43.00 -68.80
under 1 ton, per shpt	ton.	88.80 - —
New England (except Conn.), contract, 26-1000 tons per month	ton.	29.00 -35.40
spot, 1-25 tons per shpt	ton.	42.00 -62.80
under 1 ton, per shpt	ton.	82.00 - —
New Orleans, Houston, Tex., contract, 26-1,000 tons per month	ton.	29.60 -35.80
tons per month	ton.	29.60 -35.80
spot, 1-25 tons per shpt	ton.	47.00 -66.00
under 1 ton, per shpt	ton.	86.00 - —
N.Y. State (except Greater N. Y.), Penna. (W. of Harrisburg), contract, 26-1000 tons per month	ton.	30.00 -35.00
spot, 1-25 tons per shpt	ton.	41.00 -65.80
under 1 ton, per shpt	ton.	85.80 - —
Ohio, Mich., Ind., W. Va., Va., contract 26-1000 tons per month	ton.	31.00 -36.60
spot, 1-25 tons per shpt	ton.	39.60 -64.00
under 1 ton, per shpt	ton.	84.00 - —
Pacific Cst., Canada (except Windsor to Montreal), contract, 26-1000 tons per month,	ton.	48.00 -54.00
spot, 1-25 tons per shpt	ton.	57.00 -82.00
under 1 ton, per shpt	ton.	94.00 - —
"Vinylseal," adhesive solution, A35, or dms., lots, f.o.b. South Charleston, W. Va., frt. pd. E. of Miss.	gal.	2.10 - —
smaller lots, same basis	gal.	2.50 - —
T24-9, 20 dms., same basis,	gal.	2.00 - —
dm. lots, same basis	gal.	2.25 - —
smaller lots, same basis	gal.	2.50 - —
MA-28-18, 20 dms., same basis,	gal.	2.15 - —
dm. lots, same basis	gal.	2.40 - —
smaller lots, same basis	gal.	2.65 - —

"Vinylseal" adhesive solutions in 1 to 5 gal. quantities are shipped in non-returnable containers. Extra charge of 40c. for 1-gal. cans, 5-gal. containers included in price. Drum lots are shipped in 55-gal. non-returnable drums.

"Vinylite" brand resins, AYAA, AYAF, AYAT, c.l., (30,000 lbs.) paper bags, f.o.b. cars, South Charleston, W. Va., freight paid to destination E. of Mississippi river	lb.	.40 - —
2,000 to 9,999 lbs., cns., same basis	lb.	.43 - —
200 to 1,999 lbs., cns., same basis	lb.	.45 - —
1 to 199 lbs., cns., same basis	lb.	.60 - —
AYAB, cns., 200 to 1,999 lbs., same basis	lb.	.52 - —
1 to 199 lbs., same basis	lb.	.67 - —
AYAW, cns., 200 to 1,999 lbs., same basis	lb.	.52 - —
1 to 199 lbs., same basis	lb.	.67 - —
QYNA, c.l. (30,000 lbs.), paper bags, f.o.b. cars South Charleston, W. Va.	lb.	.48 - —
10,000 to 29,999 lbs., paper bags, same basis	lb.	.50 - —
2,000 to 9,999 lbs., paper bags, same basis	lb.	.52½- —
200 to 1,999 lbs., paper bags, same basis	lb.	.55 - —
1 to 199 lbs., paper bags, same basis	lb.	.65 - —
VYHF, VYLF, VYNW, VYRR, c.l. (30,000 lbs.), paper bags, same basis	lb.	.48 - —
10,000 to 29,999 lbs., paper bags, same basis	lb.	.50 - —
2,000 to 9,999 lbs., paper bags, same basis	lb.	.52½- —
200 to 1,999 lbs., paper bags, same basis	lb.	.55 - —
1 to 199, lbs., paper bags, same basis	lb.	.65 - —
VYHH, c.l. (30,000 lbs.), paper bags, same basis,	lb.	.52 - —
10,000 to 29,999 lbs., paper bags, same basis	lb.	.54 - —
2,000 to 9,999 lbs., paper bags, same basis	lb.	.55½- —
200 to 1,999 lbs., paper bags, same basis	lb.	.57 - —
1 to 199 lbs., paper bags, same basis	lb.	.67 - —
VYNS, c.l. (30,000 lbs.), paper bags, same basis,	lb.	.68 - —
10,000 to 29,999 lbs., paper bags, same basis	lb.	.70 - —
2,000 to 9,999 lbs., paper bags, same basis	lb.	.72½- —
200 to 1,999 lbs., paper bags, same basis	lb.	.75 - —
1 to 199 lbs., paper bags, same basis	lb.	.85 - —
XYSG, paper bags, 200 to 1,999 lbs., paper bags, same basis	lb.	1.25 - —
1 to 199 lbs., paper bags, same basis	lb.	1.40 - —

U.S. Gypsum Has Lime Meeting Federal Specifications

A new type of hydrated lime is announced by the United States Gypsum Company, Chicago. It is the first lime to meet the Federal specification, written to eliminate troubles with finish coats that have been reported in post offices during recent years. Since the government began its investigation, owners, managers and superintendents of schools, office buildings, hospitals and other types of structures have reported similar difficulties.

Business Wants and Offers

Minimum rate (up to 36 words), without display, $2.00 per insertion; 25c for each additional 6 words
Payable in advance at 59 John Street, New York

Agencies Wanted

BRITISH SUBJECT established in Mexico City for several years in the drug and chemical business desires representation of American houses in similar lines. Apply to "M," c/o Young & Glenn, Inc., 35 Water street, New York.

MEXICO:—If you want to export your chemical or manufactured products to Mexico through a reliable organization down there offering full moral and financial guarantees in New York, write to BOX 413, Oil, Paint and Drug Reporter.

Capital Offered

MEMBER of a Stock Exchange firm is interested as principal in furnishing limited amounts of capital to several established businesses possessing possibilities. Reply in detail—principals only. Box 156, General Post Office, N. Y.

Equipment Offered

MACHINERY FOR sale—26-inch unique Robinson attrition mill, like new, equipped with 2 20-HP AC 3-phase motors; cyclone, dust collector, shaker, screen. No dealers. BOX 420, Oil, Paint and Drug Reporter.

FOR SALE—One 2-gallon welded steel lead jacketed still, especially suitable for high temperature vacuum distillations. C. P. Harris, 174 Madison avenue, New York, N. Y.

FOR SALE—Two (2) one thousand gallon tanks, lead lined, lead coils, with agitators, speed reducer, and motor. Dimensions, 6x6 ft.; one (1) 2 in. Viking pump, gear driven with 3 H.P. motor. Best Oil Products Co., 3328 N. Clark street, Chicago, Illinois.

FOR QUICK Shipment—48 in. Tolhurst centrifuge, brass basket; 42 in. Schaum Uhlinger, rubber covered centrifuge; flaking machine 6 ft. diam., 3 ft. face; sulphur burner; 100 and 150 gallon chemical earthenware containers, also tourils; Connersville rotary blowers; large steam driven duplex vacuum pump, suitable for vacuum evaporators. Saginaw Salt Products Co., Saginaw, Mich.

Equipment Offered

STAINLESS STEEL tanks—50, 100, 200, 300 gallons—immediate delivery; No. 7 Sweetland filter; two Stokes powder fillers; ice machines, condensers. 1,700-gallon steam jacketed kettle with agitator. Leonard Supply & Equipment Co., 4603 Lancaster avenue, Philadelphia, Pa.

FIND what you want right in New York City. Pony mixers, post mixers, Day sifter-mixers, portable mixers, revolvators, jacketed kettles, tanks, three-roller mills, dough mixers. Storms - Harvey Equipment Company, 123 Bleecker street. SPring 7-8955.

FOR SALE:—Two 6x8 ft. pebble mills, 16x40 roller mills, 12x30 roller mills, 9x24 roller mills, 15 to 40-gallon pony mixers, lead mixers. Sell us your surplus equipment. Irving Barcan Company, 30 Church street, New York City.

FOR IMMEDIATE shipment—One W.&P. jacketed mixer, size 15, type VI, class BB; one W.&P. jacketed vac. mixer, size 15, type VII, class C; Day No. 30 Imperial mixer, jacketed; pebble and ball mills, lab. to 700 gals.; jar mills 1 to 15 gals.; Stokes 2½x8 ft. rotary dryer; vacuum shelf dryers; one link belt 75 ft. slat conveyor, 36 in. wide, motor driven; DeLaval No. 700 centrifuge; pony mixers; lead and paste mixers; powder mixers, up to 3,500 lbs.; varnish kettles; rotex sifters; five filter presses 32 in. sq., also 12 in. to 48 in. sq.; No. 7 and 10 Sweetland filters; 12x30 and 16x40 in. 3 roll mills; iron mills; stone mills 8 in. to 36 in.; Raymond mills No. 00, 0 and 1; jack. agit. vac. stills; kettles and tanks; vacuum pumps; colloid mills; grinders, crushers and pulverizers; centrifugals; tablet machines; disc filters; portable agitators; rotary and centrifugal pumps; powder and paste fillers; bottle fillers and washers. Only partial listing. Write for complete bulletins. We buy your surplus machinery. Stein Equipment Corp., 426 Broome street, New York City.

FOR SALE—Mikro bantam pulverizer; double 1 gal. jar mill; Tolhurst 40 in. centrifuge, copper basket; 8 ft. by 6 in. vacuum pump, motor driven; 30 in. filter press, 54 recessed plates; 18 in. Day mushroom ball mill. Lawler Company, Metuchen, N. J.

Equipment Offered

FOR SALE: One, Day 12x32 in. 5 roller mill, motor driven; pony mixers 8 to 80 gals.; three, Kent 8 in. lab. stone mills; three, Ross, 26 in. stone mills with iron mill feeds; pebble mills, lab. to 700 gals.; Day jumbo jacketed mixers, 700 and 1,250 gals.; thirty, filter presses, 12 in. to 36 in.; powder mixers, 100 to 2,000 lbs.; W.&P. mixers, lab. to 200 gals.; copper and aluminum kettles, 10 to 250 gals.; dryers; Sweetland filters, etc. Send for complete bulletins. Brill Equipment Corporation, 183 Varick street, New York, N. Y.

Equipment Wanted

WANTED—Our expansion program requires additional equipment. We need iron and wood filter presses, jacketed kettles, mixer, pulverizer, dryer, etc. No dealers. Send your offerings to Box 442, Oil, Paint and Drug Reporter.

Materials Offered

FANCY DOMESTIC peppermint and alfalfa leaves. Laforborn Farms, Culver, Indiana.

FOR SALE domestic and imported bone meal, spent bone black, crushed bones, cracklings, tankage, cocoa residues, and other fertilizer and feed material. Write for information. Box 435, Oil, Paint and Drug Reporter.

FOR IMMEDIATE sale:—Fifteen (15) tons of blended clays for oil bleaching—solvent clarification or filtration. Working samples supplied. Box 439, Oil, Paint and Drug Reporter.

LEAD ARSENATE—5 tons, spot shipment. Make us an offer. Box 440, Oil, Paint and Drug Reporter.

Materials Wanted

WILL PURCHASE your surplus and discontinued lots of chemicals, oils, waxes, dyes, intermediates, dry colors, greases, metals and other raw materials and by-products. Also entire plants. Consult inventory and plant superintendent. Barclay Chemical Co., Inc., 75 Varick street, New York. Telephone WAlker 5-4250.

Positions Vacant

PHARMACEUTICAL CHEMIST wanted for assay and control work on raw materials and finished drug preparations. Also, a bacteriologist—one with chemical background preferred. The S. E. Massengill Company, Bristol, Tennessee.

POSITION OPEN for chemist with experience in refining of white medicinal and technical mineral oils and petrolatum. Good salary. Box 434, Oil, Paint and Drug Reporter.

Positions Vacant

CHEMICAL ENGINEER wanted, experienced in process involving high pressures. Position requires designing and operating supervision of pilot plant, followed by commercial size unit. Give experience, and salary desired. Replies held confidential. Box 436, Oil, Paint and Drug Reporter.

VARNISH MAKER wanted by old established varnish manufacturer located southern New England, thoroughly experienced in processing natural and synthetic varnishes. Opportunity for advancement. Box 444, Oil, Paint and Drug Reporter.

Positions Wanted

CHEMICAL SALESMAN—Chemical engineer with seven years' of fine chemical sales experience seeks connection with future; preferably out of town. Go anywhere in U.S. Single. Highest type references. Box 437, Oil, Paint and Drug Reporter.

GENERAL MANAGER:—Successful record as executive in paint, varnish, lacquers and synthetics, in research, production, control sales and purchasing. (Industrial, trade and specification) age 36; technical education; married; christian. Employed in New York area at present. Seeks new position with full responsibility. Box 438, Oil, Paint and Drug Reporter.

Processes Offered

MANUFACTURING PROCESS for mercury salts U.S.P., CP and other interesting formulae for sale. Box 441, Oil, Paint and Drug Reporter.

Services Offered

CHEMIST and chemical engineers—if you are now unemployed send your complete chronological record of education and experience to Chemist Advisory Council, Room 811, 60 East 42nd street, New York City.

EVENING CLASS technology of oils, fats and waxes, meets in Philadelphia, Tuesdays. Course is also given by mail. Send for prospectus. Box 443, Oil, Paint and Drug Reporter.

Surplus Stock

CHECK INVENTORIES! We purchase any quantity surplus chemicals, colors, pigments, oils, waxes, drugs, pharmaceuticals, and all basic raw materials, as well as by-products, residues and wastes of all kinds. Entire plants bought. Eastern Color & Chemical Co., 143 Nassau street, New York City. COrtlandt 7-7441.

SO YOU CAN'T GET THAT MACHINE!

So your front office is hounding you, pounding for production. Well, please don't take it for granted that you CAN'T get that piece of equipment at once just because the maker may be 16 weeks behind. FMC is your reserve source for good guaranteed rebuilt units that not only save you TIME but money. A post card, letter or wire brings you immediate detailed information. What are you seeking?

Dryers

Buffalo Foundry and Machine Co. — Vacuum Drum, 5'x12', C. I. with all auxiliaries.
Buffalo Foundry and Machine Co. — Vacuum Shelf, 20 shelves, 60"x30".
Devine — Vacuum Shelf—13, and 17 shelves, 59"x78".
Rotary Vacuum Atmospheric Dryers.

Evaporators

Buffalo Foundry and Machine Co.—C. I. double effect, RC type Zaremba all copper double effect, 6' diameter Zaremba Still, double effect, 6' with salt filters.

Expellers

Anderson, No. 1's and Duo.

Filters

Sweetland, Nos. 1, 2, 5, 10.
Oliver, 3'x1' and larger to 8' diameter.
Alsop, Ertel, Scientific Disc type Filter, 2 to 12 discs with pump, motor, etc.
International, Kiefer, U. S. Bottlers, Seitz, Pulp and Paper, Mono and Multiple plate Filters.

Filterpresses

Sperry 42". 57 plates, center feed, recessed and open delivery.
Shriver, Johnson, 30" and 24" center feed, open delivery, 35 recessed plates.
Sperry 18", P & F, top corner feed and open delivery, 24 plates and 25 frames forming 1" cake.
FMC, 12" Wood P & F type open or closed delivery.

Extractors

Tolhurst, 40" solid monel basket suspended type, for motor drive with 7½ H. P. vertical motor.
Sharples, No. 6 Centrifugal M4 PIT type for motor driven steel bowls.
DeLaval Separators, Nos. 202, 600, motor driven.

Mills

Abbe, porcelain lined, 30"-36" and 72" diameters.
Thropp, silex lined, 7'x6".
Raymond 2 roll high side roller mill.
Raymond No. 0 to No. 0000 Pulverizers.
American Sprout Waldron Attrition Mills.
Day, Mead Munson beater type Mills.
Gruendler, Jay-Bee, Williams, and other Hammermills.
Hercules Cutter for meat grinding.
Abbe Ball and Jewell Mills, Mitts Merrill and other Rotary Cutters, Hogs, etc.

Mixers

W & P, 150 gals., double arm.
W & P jacketed Mixer Vacuum, type, 100 gals., as last mentioned.
W & P, Day and Reed Double arm jacketed and plain Mixers.
Day, Robinson, Eureka, from 50-2000 pounds Horizontal Mixer.

Pebble Mills, Ball Mills, Tablet Machines, Mixers, Jacketed and Unjacketed, Hydraulic Presses, Crushers, Autoclaves and other Chemical Equipment.

FULL DESCRIPTIONS AND QUOTATIONS ON REQUEST

FIRST MACHINERY CORPORATION
GUARANTEED EQUIPMENT — EMC — LIQUIDATORS APPRAISERS
EAST 9th ST. and EAST RIVER DRIVE — GRamercy 7-6620 Cable: "EFFEMCY" — NEW YORK, N.Y.
SEND FOR COMPLETE CATALOG

CONSOLIDATED CAN HELP YOU SOLVE TODAY'S PROBLEMS

LARGE STOCK — QUICK DELIVERY
MONEY SAVING

SPECIAL ITEMS FROM STOCK

4—4 ft. x 6 ft. Iron Oliver Filters.
8—2,000 lbs., 1,200 lbs., 800 lbs. Dry Powder Mixers.
2—Devine 5 ft. by 33 ft. Rotary Vacuum Dryers; other smaller sizes.
1—Jumbo 10 ft. copper Calandria Pan; otLer Vacuum Pans, 50 to 500 gals.
12—Ball Mills, 10 gals. to 500 gals.
7—3-Roller Mills, up to 16 by 40.
1—W. & P. Vacuum Mixer, 100 gals. other W. & P., 2 gals. to 2,000 gals.
1—450 gal. Nickel Jacketed Kettle.
1—Stokes 90-C Auto. Tube Filler, Closer, Clipper.

FINAL CLOSING OUT
Machinery and Equipment of Drug, Food and Chemical Mfr.
Located at Buffalo, N. Y.

Send for Printed Circular Listing: Complete Coffee Dept.; Packaging Units; Dry Powder Mixers; Rotary Labeler; Percolators; Copper Tanks. Glass Lined Tanks; Jacketed Kettles; Grinders; Pulverizers; Suppository and Lipstick Molds; Pumps.

Don't Forget our Regular Stock of the Finest Rebuilt Machinery and Equipment—Send for Complete Lists

CONSOLIDATED PRODUCTS CO., Inc.
13-18 Park Row - - New York, N. Y.
SHOPS, 335 Doremus Avenue, Newark, N. J.

J. Fred Reeves, manufacturing superintendent of the Anniston, Alabama, plant of Monsanto Chemical Company, has been promoted to assistant plant manager.

John T. Masterson of the Prior Chemical Corporation, this city, was married on October 28 to Miss Robbie Lee Gowan, daughter of Mr. and Mrs. J. T. Gowan of Bemis, Tenn.

Index to Advertisements

Acme Steel Drum Co. ... 63
Advance Solvents & Chemical Corp. ... —
Alabama Charcoal Co. ... 34
Alexander, Jerome ... 76
Alkydol Laboratories, Inc. ... —
Allied Asphalt & Mineral Corp. ... 55
American Agricultural Chemical Co. ... —
American British Chem. Supplies, Inc. ... 32
American Can Co. ... —
American Cyanamid & Chemical Corp. ... —
American Firstoline Corp. ... 54
American Flange & Mfg. Co. ... —
American Potash & Chemical Corp. ... —
Anderson-Prichard Oil Corp. ... —
Ansbacher-Siegle Corp. ... 55
Apex Chemical Co., Inc. ... —
Association of Consulting Chemists and Chemical Engineers, Inc. ... 76
Atlantic Coast Fisheries Co. ... 66
Atlantic Refining Co. ... —
Atlas Powder Co. ... 66

Baker, J. T., Chemical Co. ... 1
Barber Asphalt Co. ... —
Barium & Chemicals, Inc. ... 34
Barium Reduction Corp. ... 32
Barrett Company ... 38, 77
Bemis Bro. Bag Co. ... 28
Benzol Products Co. ... 66
Berk, F. W., & Co., Inc. ... 65
Binney & Smith Co. ... 51
Brazil Oiticica, Inc. ... 47
Brighton Copper Works ... 60
Brode Corp., The ... 41
Bromund, E. A., Co. ... 41
Bureau of Chemistry ... 76
Burke, Edw. S. ... —
Bush Pan-America, Ltd. ... 74
Bush, W. J., & Co., Inc. ... 73

Calco Chemical Division ... 59
Calif. Fruit Growers Exchange ... —
Capital City Products Co. ... —
Carbide & Carbon Chemicals Corp. ... —
Carey, The Philip, Co. ... 68
Chemical & Pigment Co. ... 53
Chemical Industries, Exposition of ... —
Chemical Solvents, C. P., Inc. ... 82
Church & Dwight Co. ... 82
Colgate-Palmolive-Peet Co. ... 68
Colledge, E. W., General Sales Agent ... 53
Colton, Arthur, Co. ... —
Columbia Chemical Division ... —
Commercial Solvents Corp. ... 19
Consolidated Products Co., Inc. ... 80
Consumers Import Co., Inc. ... 66
Continental Can Co. ... 9
Coupe, Robert A. ... 34
Cowles Detergent Co. ... 24
Crown Can Co. ... —

Darling & Co. ... 37
Day Chemical Company ... 76
Desert Chemical Company ... 35
Diamond Alkali Co. ... 33
Dickhart, W. H. ... 76
Dodge & Olcott Co. ... 73
Doggett, Stanley, Inc. ... —
Dorward & Sons Co. ... 56
Douglass Sulphur Co. ... —
Dow Chemical Co. ... —
Dunkel, Paul A., & Co., Inc. ... —
DuPont de Nemours, E. I., & Co., Inc. ... 1
Durez Plastics & Chemicals, Inc. ... 29

Eastman Kodak Co. ... —
Eelsingh & Lugtigheid ... 69
Ehrlich, J. ... 76
Ellis-Foster Co. ... 76
Emery Industries, Inc. ... 40
Enequist Chemical Co. ... 34
English Mica Co. ... 57
Euston Lead Co. ... 53

Faesy & Besthoff, Inc. ... —
Felton Chemical Co., Inc. ... —
Fezandie & Sperrle ... 56
First Machinery Corp. ... 80
Food Research Laboratories, Inc. ... 76
Frank-Vliet Co., Inc. ... 72
Franks Chemical Products Co. ... 52
Freeport Sulphur Co. ... —
Fritzsche Bros., Inc. ... 63, 72
Fulton Bag & Cotton Mills ... —

Gartenberg, H., & Co. ... 37
General Drug Co. ... 20
General Electric Co. ... 29
Gesell, R., Inc. ... 68
Gillespie-Rogers-Pyatt Co. ... 57
Givaudan-Delawanna, Inc. ... —
Golwynne Chemical Corp. ... 23
Gray, William S., & Co. ... 1
Gray Industrial Laboratories ... 76
Greeff, R. W., & Co. ... 69
Griffin Chemical Co. ... —
Gross, A., & Co. ... 40
Gruman, J. B., Co. ... —

Hallowell, Horace J. ... 76
Hardesty, W. C., Co., Inc. ... 40
Harshaw Chemical Co. ... 16
Heekin Can Co. ... —
Heyden Chemical Corp. ... —
Holt, C. J., Co., Inc. ... 76
Hooker Electrochemical Co. ... —
Hopkins, J. L., & Co. ... 71
House of Wallace ... 73
Huisking, Chas. L., & Co. ... 68
Hutchinson, D. W., & Co., Inc. ... 73

Imperial Paper & Color Corp. ... —
Independent Mfg. Co. ... 41
Industrial Consulting Labs., Inc. ... 76
Inland Alkaloid Co. ... 82
Innis, Speiden & Co. ... —
International Pulp Co. ... 60
International Selling Corp. ... —
Irvington Smelting & Refining Works ... —

Jackle, Frank R. ... 77
Jones & Laughlin Steel Corp. ... —
Jungmann & Co., Inc. ... 66

Kachurin Drug Co. ... 71
Kelco Co. ... —
Kentucky Color & Chemical Co. ... 63
Kessler Chemical Co., Inc. ... 65
Khosrovschahi, Morteza ... 72
Knight, B. H. ... 76
Koppers Company ... 39
Krebs Pigment & Color Corp. ... 81

Laning, E. M., Co. ... 76
LaWall & Harrisson ... 76
Leghorn Trading Co. ... 66
Lemke, B. L., Fine & Rare Chemicals ... 69
Leonhard, Theodor, Wax Co., Inc. ... 41
Lewistown Corporation Laboratories ... 67
Lueders, George & Co. ... —

Magnetic Pigment Co. ... 52
Magnus, Mabee & Reynard, Inc. ... 6, 73
Mallinckrodt Chemical Works ... —
Mantrose Corp. ... 62
Marine Magnesium Products Corp. ... —
Mathieson Alkali Works, Inc. ... —
McKesson & Robbins, Inc. ... 67
Menhaden Fish Products Co. ... —
Mercantile Import & Export Co. ... 66
Merck & Co., Inc. ... 42, 43
Metals Refining Co. ... 53
Metasap Chemical Co. ... —
Meyer, Herman, Drug Co., Inc. ... 66
Michigan Alkali Co. ... 11
Millmaster Chemical Co. ... —
Mills, Zophar, Inc. ... —
Minnesota Specialty Co. ... 63
Molnar Laboratories ... 76
Monsanto Chemical Co. ... 64
Munch, James C. ... 76
Murphy Varnish Co. ... 53
Mutual Chemical Co. of America ... 37

National Aniline & Chemical Co., Inc. ... —
National Box & Lumber Co. ... —
National Can Corp. ... 26, 27
National Lead Co. ... 15, 34
National Milk Sugar Co. ... 66
National Rosin Oil & Size Co. ... —
Natural Products Refining Co. ... 37
Neuberg Chemical Corp. ... 13
Neville Co. ... —
Newark Steel Drum Co. ... 51
New Jersey Zinc Co. ... 61
N. Y. Quinine & Chemical Works, Inc. ... —
Niacet Chemicals Corp. ... 37
Niagara Alkali Corp. ... 22

Oil States Petroleum Co., Inc. ... 75
Oldbury Electro-Chemical Co. ... —
Orbis Products Corp. ... 74
Orthmann Laboratories, Inc. ... 76
Osborn, C. J., Co. ... 60

Pacific Alkali Co. ... 35
Pacific Coast Borax Co. ... 1
Pacific Vegetable Oil Corp. ... 60
Paramet Chemical Corp. ... 59
Parsons, M. W. ... 66
Penick, S. B., & Co. ... 70
Pennsylvania Coal Products Corp. ... 66
Pennsylvania Industrial Chem. Corp. ... —
Pennsylvania Refining Corp. ... 75
Pennsylvania Salt Mfg. Co. ... —
Pfaltz & Bauer, Inc. ... 35
Pfizer, Chas., & Co., Inc. ... 31
Phelps Dodge Refining Co. ... —
Philadelphia Quartz Co. ... —
Philipp Brothers, Inc. ... 32
Phosphate Mining Co. ... 32
Pittsburgh Plate Glass Co. ... —
Polachek, Z. H. ... 76
Potash Co. of America ... —
Prentiss, R. J., & Co. ... 72
Prior Chemical Corp. ... 1
Procter & Gamble ... 40, 66
Publicker Commercial Alcohol Co. ... —
Purdy, W. S., Co., Inc. ... 76
Pure Calcium Products Div. ... —
Purocaine Chemical Co. ... —

Raisch, John E., & Co. ... 76
Reed-Blair Laboratories ... 76
Reichhold Chemicals, Inc. ... —
Republic Chemical Corp. ... 81
Republic Steel Corp. ... —
Rheem Mfg. Co. ... —
Ridbo Laboratories, Inc. ... 51
Robinson-Wagner Co. ... —
Rosenthal, H. H., Co., Inc. ... 82
Rufert Chemical Co. ... 23

Sadtler, Samuel P., & Son, Inc. ... 76
St. Joseph Lead Co. ... 44
Schuylkill Chemical Co. ... 82
Schwarz Laboratories, Inc. ... 76
Sell, Putt & Rusby, Inc. ... 76
Seydel Chemical Co. ... —
Sharples Chemicals, Inc. ... 1
Sheffield Bronze & Powder Co. ... —
Shell Oil Co. ... —
Sherwood Refining Co., Inc. ... 75
Silzle, E. A., Corp. ... —
Skelly Oil Co. ... —
Smith, Kline & French Labs. ... 68
Snell, Foster, D., Inc. ... 76
Socony-Vacuum Oil Co., Inc. ... —
Solvay Sales Corp. ... 25
Sonneborn, L., Sons, Inc. ... 82
Southern Acid & Sulphur Co., Inc. ... 34
Sparkler Mfg. Co. ... 63
Standard Alcohol Co. ... —
Standard Brands, Inc. ... 2
Standard Oil Co. of Calif. ... 75
Standard Specialty & Tube Co. ... 74
Standard Synthetics, Inc. ... —
Standard Ultramarine Co. ... —
Stauffer Chemical Co. ... 34
Stillman & Van Siclen, Inc. ... 76
Stillwell & Gladding ... 76
Stroock & Wittenberg Corp. ... 50
Sun Oil Co. ... —

Taintor Trading Co., Inc. ... —
Tamms Silica Co., Inc. ... —
Tar & Chemical Div. of Koppers Co. ... 39
Tar Residuals, Ltd. ... 69
Tennessee Corp. ... 34
Texas Gulf Sulphur Co., Inc. ... 77
Thompson-Hayward Chemical Co. ... 34
Thornton, The F. C., Co. ... —
Thurston & Braidich ... 82
Titanium Pigment Corp. ... 58
Todd, A. M., Co. ... —
Tombarel Products Corp. ... —
Truesdall Laboratories, Inc. ... 78
Turner, Joseph, & Co. ... 32

Union Carbide & Carbon Corp. ... —
U. S. Industrial Chemicals, Inc. ... 17, 18
United States Potash Co. ... —
Universal Trading Corp. ... 49

Vanderbilt, R. T., & Co., Inc. ... 62
Van Schaack Chemical Works, Inc. ... 73
Victor Chemical Works ... 34
Viking Distributing Co. ... —
Vitro Mfg. Co. ... —
Vol-U-Meter Co. ... 60

Wah Chang Trading Corp. ... 41
Warner Chemical Co. ... —
Weiss & Downs, Inc. ... 76
Wet Ground Mica Assn., Inc. ... —
White Tar Co. of N. J. ... 39
Wiley & Co., Inc. ... 76
Will & Baumer Candle Co., Inc. ... —
Williams, C. K., & Co. ... 60
Wilson Carbon Co. ... —
Wilson-Martin Division ... 40
Wishnick-Tumpeer, Inc. ... —
Woburn Degreasing Co. of N. J. ... 54
Wolf, Jacques, & Co. ... —
Wood Preserving Corp. ... 39
Wood Ridge Division ... 65

Zinsser & Co., Inc. ... 34
Zophar Mills, Inc. ... —

For

SUPPLIES OF STRATEGIC CHEMICAL MATERIALS

CALL

94 BEEKMAN STREET NEW YORK, N. Y.
Telephone REctor 2-9810 Cable Address "Jaynivrad"

BEHIND THIS DOOR *are the answers to your paint problems*

IT LEADS to Krebs fully-equipped paint laboratory . . . which is at your disposal in dealing with the numerous problems resulting from the lack of raw materials hitherto considered vital.

Questions arising from the pigmentation of new types of vehicles . . . the substitution of one prime pigment for another, the necessity of maintaining quality at suitable costs . . . can be answered for you in this laboratory by the Krebs Technical Staff.

In addition, problems where the durability factor is the prime element can be solved by simply referring to the data accumulated by Krebs from ten years of exterior exposure studies. The results of these tests are in chart form and in the hands of each Krebs Technical Service Representative.

Call him in to advise you on necessary formula revisions. He'll also arrange for you to receive laboratory assistance. Contact him today. Krebs Pigment & Color Corporation, 1007 Orange Street, Wilmington, Delaware.

KREBS RESEARCH
KREBS
REG. U.S. PAT. OFF.
MEANS PIGMENT PROGRESS

C. P. Acetone Butyl Alcohol Butyl Acetate
CHEMICAL SOLVENTS
Incorporated
11 Park Place Telephone BArclay 7-8615-6-7 New York

White Oil and Petrolatum
FOR ALL PHARMACEUTICAL, COSMETIC and INDUSTRIAL PURPOSES
L. SONNEBORN SONS, INC.
Refiners of White Mineral Oil and Petrolatum — Refineries: Petrolia and Franklin, Pa.
NEW YORK • CHICAGO • BALTIMORE • PHILADELPHIA • LOS ANGELES
Southwestern Distributors: Sonneborn Bros., Dallas, Tex.
Stocks Carried in Principal Cities

DRUGS • CHEMICALS • OILS • WAXES
Serving the Needs of Buyers Here and Abroad, for a Quarter Century
YOUR CONTACT WITH THE WORLDS MARKETS
H. H. ROSENTHAL CO. INC
CABLE ADDRESS: "RODRUG" ALL CODES
25 EAST 26th STREET NEW YORK CITY

FINEST QUALITY
BICARBONATE OF SODA
SAL SODA (Carbonate of Soda Crystals)
MONOHYDRATE OF SODA
PIONEER WASHING SODA
CHURCH & DWIGHT CO.
70 PINE STREET Phone DIgby 4-2181 NEW YORK CITY

POTASSIUM SULPHATE C.P. and N.F.
POTASSIUM CHLORIDE C.P. and N.F.
POTASSIUM ACETATE U.S.P.
POTASSIUM CITRATE U.S.P.
SCHUYLKILL CHEMICAL COMPANY
2346-2354 Sedgley Avenue - Philadelphia, Pa.

Lacquer and Varnish Gums
Thurston & Braidich, Importers, 286 Spring St., New York

ALKALOIDS
GLUCOSIDES—DRUG EXTRACTIVES
As in WORLD WAR I
Now in WORLD WAR II

ACONITINE
ARECOLINE
ASPIDOSPERMINE
ATROPINE
BERBERINE
CHRYSAROBIN
COLCHICINE
DIGITALIN
EPHEDRINE
ESERINE
HOMATROPINE

Our laboratories are answering the challenge of keeping pace with the unprecendented demand for alkaloids, glucosides, and allied drug extractives for domestic consumption and for export to other countries of the Western Hemisphere.

Our alkaloidal chemists and botanical staff are cooperating with you to the utmost in coping with the present emergency in regard to our supplying this vital group of drug products. The service that we are rendering is backed by twenty-four years of continuous production of alkaloids, World War I experience, comprehensive research endeavors, and extensive manufacturing facilities.

HYDRASTINE
HYOSCINE
HYOSCYAMINE
LOBELINE
PICROTOXIN
PILOCARPINE
SANGUINARINE
SPARTEINE
STROPHANTHIN
YOHIMBINE

INLAND ALKALOID COMPANY
Manufacturing Chemists
TIPTON INDIANA U. S. A.